WOODSTOCK

SHOP FOX®

INTERNATIONAL

MODEL W1812

VARIABLE SPEED PLANER/ MOULDER WITH STAND

OWNER'S MANUAL

(FOR MODELS MANUFACTURED SINCE 3/09)

Phone: (360) 734-3482 • Online Technical Support: tech-support@shopfox.biz

#11399CR

Printed in Taiwan

Model W1812
Variable Speed Planer/ Moulder With Stand
Manual Update

Phone #: (360) 734-3482 • Online Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz

Improvements to this machine were made since the manual was originally printed, and this manual update covers those changes. Keep this page with your owner's manual in case you ever need to refer to it.

New and Updated Parts Added

We have added a series of parts to the Model W1812. For increased machine safety, we added a chain guard shown as item 86 in **Figure 1**. For increased leadscrew stability, we added the collar shown as item 95V2.

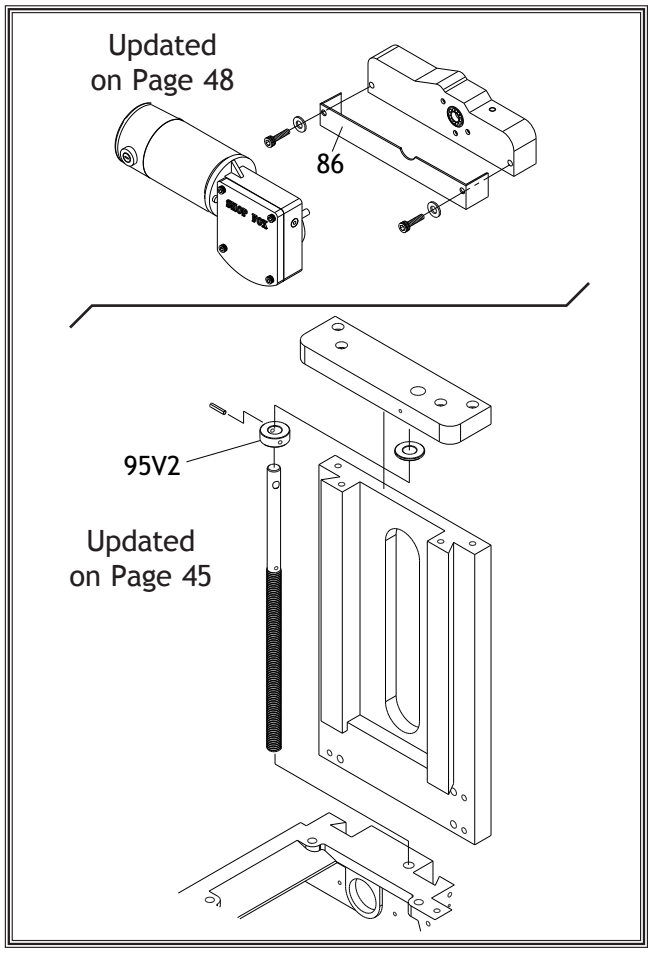

Figure 1. W1812 chain guard and collar.

For improved shipping stability, we added an updated shipping brace system, which is shown as the numbered items in **Figure 2.**

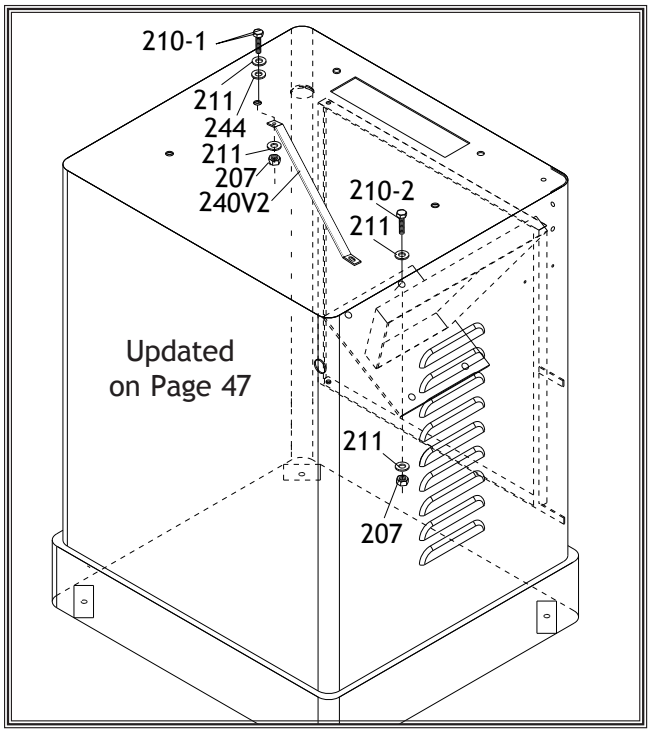

Figure 2. W1812 shipping brace system.

REF	PART #	DESCRIPTION
86	X1812086	SAFETY GUARD
95V2	X1812095V2	COLLAR V2.10.09
207	XPN02	HEX NUT 5/16-18
210-1	XPB03	HEX BOLT 5/16-18 X 1
210-2	XPB12	HEX BOLT 5/16-18 X 1-1/4
211	XPW07	FLAT WASHER 5/16
240V2	X1812240V2	BRACKET V2.10.09
244	X1812244	PLASTIC WASHER 5/16

#12268CR
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⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!

INTRODUCTION

Woodstock Technical Support

This machine has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

Woodstock International, Inc. is committed to customer satisfaction. Our intent with this manual is to include the basic information for safety, setup, operation, maintenance, and service of this product.

We stand behind our machines! In the event that questions arise about your machine, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: **tech-support@shopfox.biz**. Our knowledgeable staff will help you troubleshoot problems and process warranty claims.

If you need the latest edition of this manual, you can download it from **http://www.shopfox.biz**.
If you have comments about this manual, please contact us at:

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Controls and Features

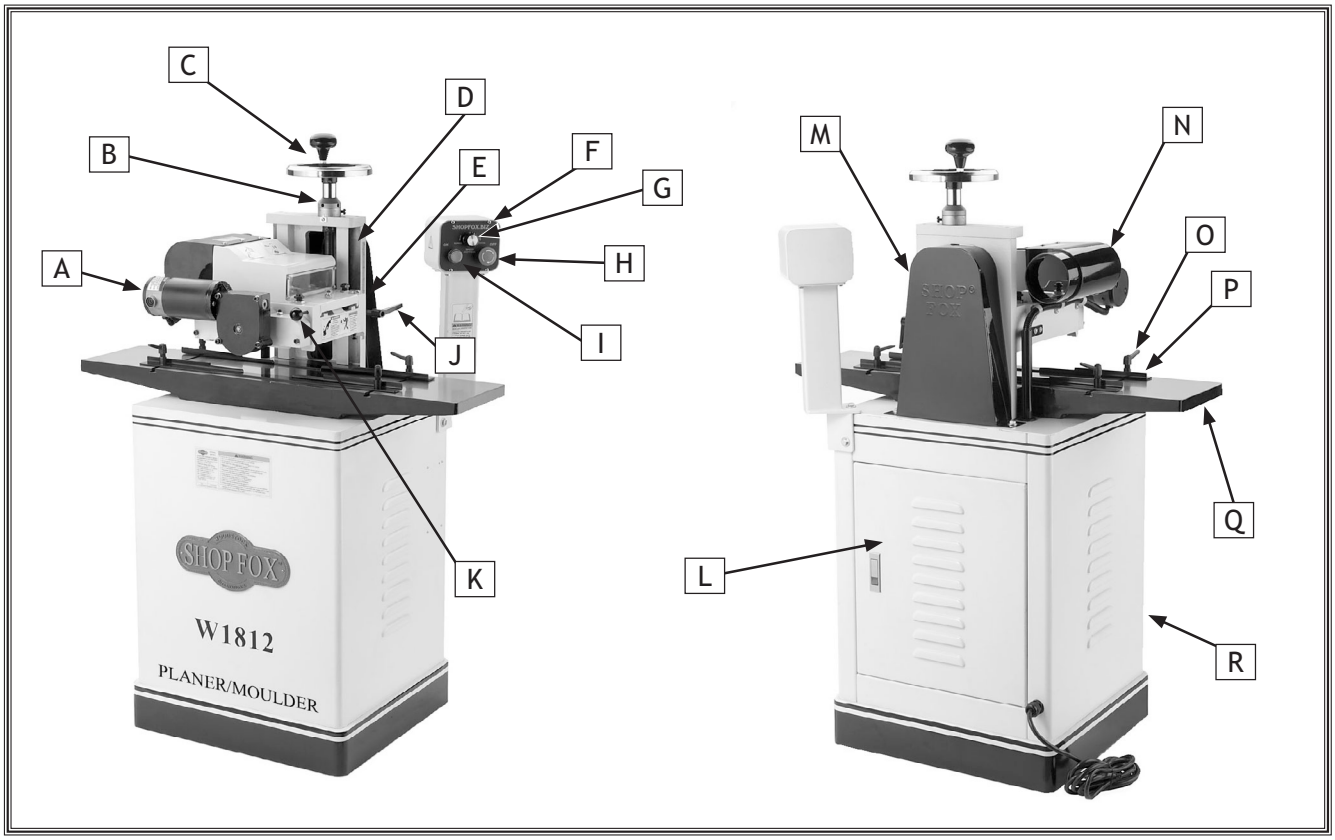


Figure 1. W1812 Front and rear view.

A. Feed Motor
B. Handwheel Scale
C. Headstock Height Handwheel
D. Dovetailed Column
E. Headstock Scale
F. Control Panel
G. Feed Speed Control Dial
H. Emergency Stop Button
I. Cutterhead ON Button
J. Headstock Lock Lever
K. Chip Deflector Lock Pin
L. Cabinet Door
M. Belt Cover
N. Dust Cover w/Port
O. Guide Rail Lock Lever
P. Guide Rail Set
Q. Cast Iron Table and Wings
R. Vented Sheet Metal Cabinet

MACHINE SPECIFICATIONS

Phone #: (360) 734-3482 • Online Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz

MODEL W1812 SHOP FOX
VARIABLE SPEED PLANER/MOULDER WITH STAND

Overall Dimensions

Weight	306 lbs.
Length	36 1/4"
Width	22"
Height	34 1/2"
Foot Print (Length x Width)	21" x 19"

Shipping Dimensions

Total Shipping Weight	324 lbs.
Box 1 Length x Width x Height	40 1/8" x 19 3/4" x 22 1/8"
Box 1 Weight	185 lbs.
Box 2 Length x Width x Height	22 7/8" x 21 1/4" x 30 1/4"
Box 2 Weight	139 lbs.

Electrical

Switch	Magnetic Switch w/Thermal Overload Protection
Switch Voltage	220V
Cord Length	10 ft.
Cord Gauge	14 gauge
Recommended Breaker Size	15 amp
Plug	No

Motors

Cutterhead

Type	TEFC Capacitor Start Induction
Horsepower	2 HP
Voltage	220V
Phase	Single
Amps	12A
Speed	3450 RPM
Cycle	60 Hz
Number Of Speeds	1
Power Transfer	Power Twist V-Belt
Bearings	Shielded and Lubricated

Feed Rollers

Type	DC Universal
Horsepower	1/4 HP
Voltage, Amps	180VDC, 1.5A
Phase	Single
Motor Speed	0-55 RPM (w/(Voltage Reduction)
Feed Speed	0-18 FPM
Cycle	60 Hz
Number Of Speeds	Variable Speed
Power Transfer	Chain Drive

Main Specifications

Cutting Capacities

Maximum Planing Width	7"
Maximum Planing Depth	1/8"
Maximum Planing Height	7 1/2"
Maximum Profile Width	6 3/4"
Maximum Profile Depth	3/4"
Minimum Stock Thickness	1/4"
Minimum Stock Length	9"

Knife Information

Number of Knives	2
Knife Type	HSS
Knife Length	7 1/8"
Knife Width	1 1/2"
Knife Thickness	1/4"
Number of Cuts Per Minute	14,000
Number of Cuts Per Inch	64-300

Cutterhead Information

Cutterhead Type	Square
Cutterhead Diameter	1 1/4"
Cutterhead Speed	7000 RPM

Table Information

Table Length w/Wings	36 1/4"
Table Length w/o Wings	14 1/8"
Table Width	10"
Table Thickness	7/16"
Extension Wing Length	11"
Extension Wing Width	8 9/16"
Floor to Table Height	30 3/8"

Other Information

Number of Dust Ports	1
Dust Port Size	4"
Measurement Scale Units	Inches

Construction Materials

Cabinet	Formed Steel
Body Assembly	Cast Iron
Cutterhead Assembly	Steel
Table & Extension Wing	Precision Ground Cast Iron
Paint	Powder Coat
Infeed and Outfeed Rollers	Rubber Coated Steel

Other

Serial Number Location	ID Label on Front of Stand
Customer Assembly Time	Approximately 45 Minutes
Warranty	2 Year
Country of Origin	Taiwan

Features

Heavy-Duty Cast Iron Handwheel with Inch Measurement Scale for Cutterhead Housing Lift
Precision-Ground Cast Iron Infeed and Outfeed Extension Wings
Dovetailed Way for Cutterhead Housing with Precision Gib Adjustments
Pedestal-Mounted Control Switch with Variable Speed Control

SAFETY

READ MANUAL BEFORE OPERATING MACHINE. FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL RESULT IN PERSONAL INJURY.

⚠DANGER Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

⚠WARNING Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

⚠CAUTION Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.

NOTICE This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

Standard Safety Instructions

1. **READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.

2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.

3. **ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.

4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.

5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.

6. **NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.

8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.

9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power ***OFF*** and allow all moving parts to come to a complete stop before leaving machine unattended.

11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.

12. **KEEP WORK AREA CLEAN AND WELL LIT**. Clutter and dark shadows may cause accidents.

13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.

14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY**. Make sure switch is in OFF position before reconnecting.

15. **MAINTAIN MACHINERY WITH CARE**. Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**

17. **REMOVE ADJUSTING KEYS AND WRENCHES**. Make a habit of checking for keys and adjusting wrenches before turning machinery ***ON***.

18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.

19. **USE RECOMMENDED ACCESSORIES**. Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.

20. **DO NOT FORCE MACHINERY**. Work at the speed for which the machine or accessory was designed.

21. **SECURE WORKPIECE**. Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.

22. **DO NOT OVERREACH**. Keep proper footing and balance at all times.

23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR**. Know and avoid conditions that cause the workpiece to "kickback."

24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**

25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.

Additional Safety for Planer/Moulders

⚠WARNING

READ and understand this entire manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading!

⚠CAUTION

USE this and other machinery with caution and respect. Always consider safety first, as it applies to your individual working conditions. No list of safety guidelines can be complete—every shop environment is different. Failure to follow guidelines could result in serious personal injury, damage to equipment or poor work results.

1. **INSTRUCTION MANUAL.** This machine presents significant safety hazards to untrained users. Read/understand this entire manual before starting the planer/moulder.

2. **REACHING INSIDE PLANER/MOULDER.** Never reach inside planer/moulder or remove covers when the planer/moulder is connected to power.

3. **INFEED CLEARANCE SAFETY.** The infeed roller is designed to pull material into the cutterhead. Always keep hands, clothing, and long hair away from the infeed roller during operation to prevent serious injury.

4. **BODY POSITION WHILE OPERATING.** The workpiece may kick out during operation. To avoid getting hit, stand to the side of the planer/moulder during the entire operation.

5. **PLANING CORRECT MATERIAL.** Only plane natural wood stock with this planer/moulder. DO NOT plane MDF, plywood, laminates, or other synthetic products.

6. **GRAIN DIRECTION.** Cutting across or against the grain is hard on the planer/moulder and may increase the risk of workpiece kick out. Always cut with the grain or at a slight angle with the grain.

7. **LOOKING INSIDE PLANER/MOULDER.** Wood chips fly around inside the planer/moulder at a high rate of speed. DO NOT look inside the machine or remove any guards or covers during operation.

8. **KNIFE CLEARANCE.** Before starting the machine, always verify that the moulding knives do not contact any part of the workpiece guide rails, feed roller swing arm, or the table surface. **Failure to verify knife clearance may result in severe injury and machine damage!**

9. **REMOVING JAMMED WORKPIECES.** To avoid serious injury, always stop the planer/moulder and disconnect power before removing jammed workpieces.

10. **DULL/DAMAGED CUTTERS.** The planer/moulder may kick out a workpiece at the operator or give poor finish results if it is operated with dull or damaged blades.

11. **UNPLUGGING DURING ADJUSTMENTS.** When connected to power, the planer/moulder can be accidentally turned ***ON***. Always disconnect power when servicing or adjusting machine components.

12. **WORKPIECE CLEARANCE.** Always verify workpiece has enough room to exit the planer before starting.

ELECTRICAL

⚠WARNING

The machine must be properly set up before it is safe to operate. DO NOT connect this machine to the power source until instructed to do so in the "Test Run" portion of this manual.

220V Operation

The Model W1812 is wired for 220V single-phase operation. The power supply circuit used for this machine MUST be grounded and rated for the amperage given below. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. This machine must be connected to a grounded circuit!

A plug is not supplied with this machine. See below for the recommended plug type for this machine.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire or circuit overload hazard—consult a qualified electrician to reduce this risk.

Extension Cords

We do not recommend using an extension cord; however, if you have no alternative, use the following guidelines:

- Use a cord rated for Standard Service (S).
- Do not use an extension cord longer than 50 feet.
- Ensure that the cord has a ground wire and pin.
- Use the gauge size listed below as a minimum.

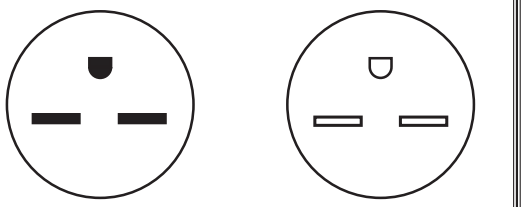


Figure 2. 6-15 plug and receptacle.

⚠WARNING

DO NOT work on your electrical system if you are unsure about electrical codes and wiring! Seek assistance from a qualified electrician. Ignoring this warning can cause electrocution, fire, or machine damage.

Electrical Specifications

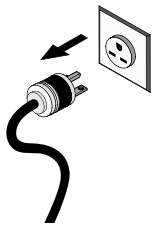
Operating Voltage	Amp Draw	Min. Circuit Size	Recommended Plug	Extension Cord
220V Operation	12 Amps	15A	NEMA 6-15 (not incl.)	14 Gauge

SETUP

Unpacking

This machine has been carefully packaged for safe transportation. If you notice the machine has been damaged during shipping, please contact your authorized Shop Fox dealer immediately.

WARNING



Keep machine disconnected from power until instructed otherwise.

Inventory

The following is a description of the main components shipped with the Model W1812. Lay the components out to inventory them.

Note: *If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for safer shipping.*

Box Inventory (Figure 3)	Qty
A. Dust Port	1
B. Planer/Moulder Head	1
C. Link Belt	1
D. Cabinet	1
E. Belt Cover	1
F. Guide Rail Set	1
G. Pedestal Switch	1
H. Handwheel w/Knob	1
I. Steel Conduit	1
J. Hardware Bag	1
— Hex Bolts 5/16"-18 x 3/4" (Planer/Moulder Head)	4
— Flat Washers 5/16" (Planer/Moulder Head)	4
— Hex Bolts 5/16"-18 x 1" (Pedestal Switch)	3
— Flat Washers 5/16" (Pedestal Switch)	3
— Flange Screws #10-24 x 1/2" (Dust Port)	3
— Hex Bolts 5/16"-18 x 3/4" (Belt Cover)	2
— Flat Washers 5/16" (Drive Belt Cover)	4
— Hex Nuts 5/16"-18 (Drive Belt Cover)	2
— Lock Levers 1/4"-20 x 3/8" (Guide Rail)	4
— T-Slot Nuts 1/4"-20 (Guide Rail)	4
— Feet (Cabinet)	4
— Hex Nuts 3/8" x 16 (Feet)	8
— Hex Bolts 3/8" x 16 x 1 1/4" (Feet)	4
— Hex Wrenches 3/32", 4, 5mm	1 EA
— Open-End Wrench 12/14mm	1
— Depth Stop Hex Bolt 1/4"-20 x 1"	1
— Depth Stop Hex Nut 1/4"-20	1

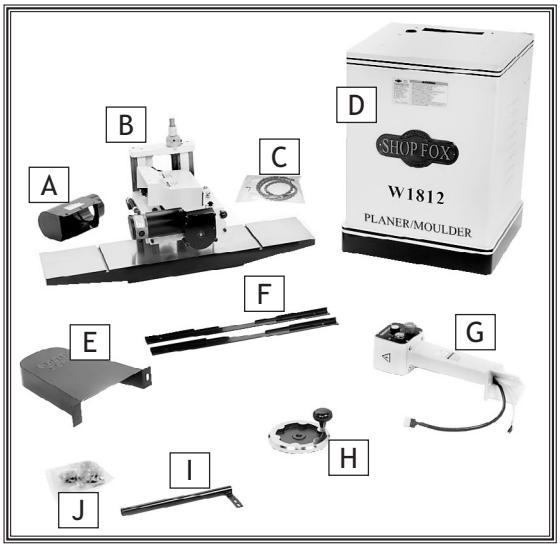


Figure 3. Inventory

Machine Placement

- **Floor Load:** This machine distributes a heavy load in a small footprint. Some residential floors may require additional bracing to support both machine and operator.

- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your planer/moulder.

- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.

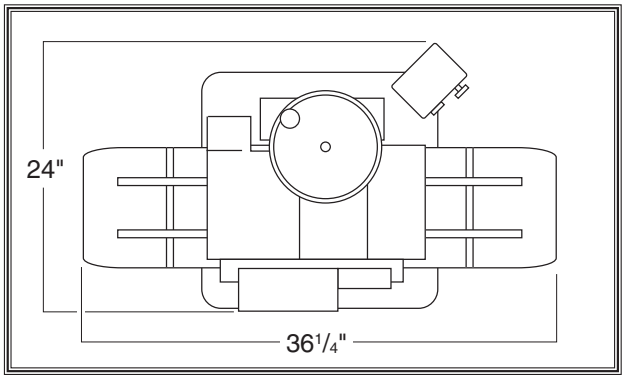
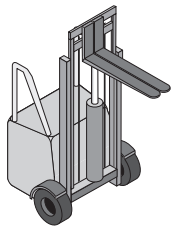


Figure 4. Minimum working clearances.



WARNING

USE helpers or power lifting equipment to lift the planer/moulder. Otherwise, serious personal injury may occur.

CAUTION

MAKE your shop "child safe." Ensure that your workplace is inaccessible to children by closing and locking all entrances when you are away. NEVER allow untrained visitors in your shop when assembling, adjusting or operating equipment.

Cleaning Machine

The table and other unpainted parts of your planer/moulder are coated with a waxy grease that protects them from corrosion during shipment. Clean this grease off with a solvent cleaner or citrus-based degreaser. DO NOT use chlorine-based solvents such as brake parts cleaner or acetone—if you happen to splash some onto a painted surface, you will ruin the finish.

WARNING

NEVER clean with gasoline or other petroleum-based solvents. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!

CAUTION

ALWAYS work in well-ventilated areas far from possible ignition sources when using solvents to clean machinery. Many solvents are toxic when inhaled or ingested. Use care when disposing of waste rags and towels to be sure they DO NOT create fire or environmental hazards.

Lifting and Moving

The Model W1812 can be moved for short distances if two people lift the ends of the cast iron extension wings and walk the machine to the new location. For ease of mobility, the machine can be placed on a Shop Fox Model D2057 Heavy Duty Mobile Base.

For long distance moving, we recommend using a forklift or other mechanical lifting device.

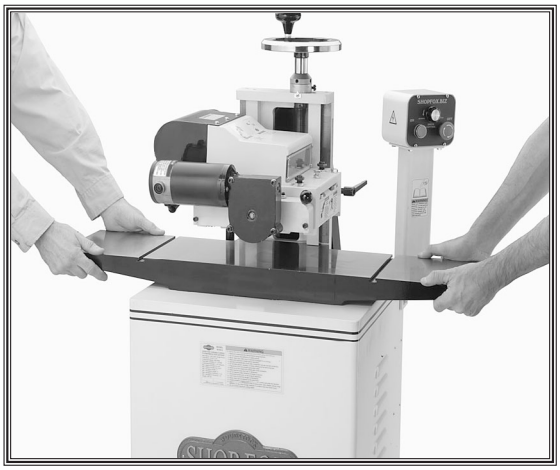


Figure 5. Lifting location.

Mounting to Shop Floor

Although not required, for increased stability you can mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. We recommend using a precision level on the table surface to make sure that your machine rests flat.

Bolting to Concrete Floors

Anchor studs or lag screws and anchors (**Figure 6**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag screws and anchors; however, anchor studs will stick out of the floor, which may cause a tripping hazard later if you decide to move your machine.

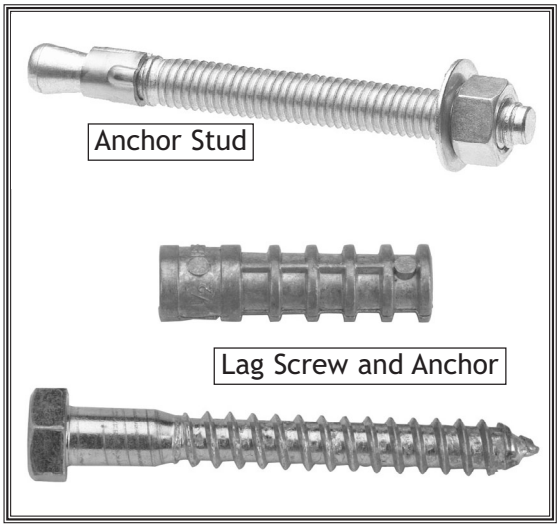


Figure 6. Typical fasteners for mounting to concrete floors.

SETUP

Assembly

To assemble the planer/moulder, do these steps:

1. With the help of an assistant, lay the stand on its side, then insert the 3/8" x 16 x 1 1/4" hex bolts through the rubber feet, then thread on a 3/8" x 16 hex nut onto each bolt.

2. Next, thread each bolt into the reinforced holes shown in **Figure 7**, and then thread the four remaining 3/8" x 16 hex nuts onto each bolt to lock the feet in place.

   Note: *For a pre-made heavy-duty mobile base option instead of using the feet, you can place the cabinet directly on the Shop Fox Model D2057 Heavy-Duty Mobile Base equipped with swivel casters and post brakes.*

3. Position the stand upright, then adjust the feet so the cabinet sits level on the floor.

4. When level, tighten the jam nuts to lock the feet in place.

5. With the help of an assistant, lift the planer/moulder headstock and position it onto the cabinet, as shown in **Figure 8**.

6. Open the cabinet door, then secure the headstock to the cabinet with four 5/16"-18 x 3/4" hex bolts and 5/16" flat washers.

7. Remove the shipping brace shown in **Figure 9**.

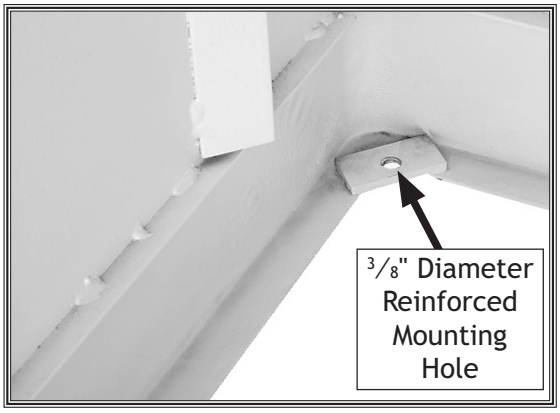


Figure 7. Foot installation.

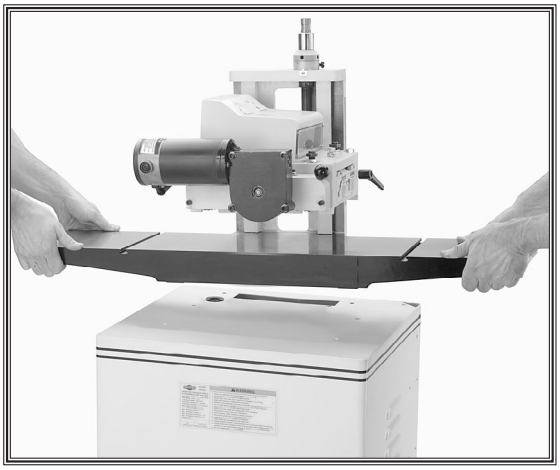


Figure 8. Suggested lifting locations.

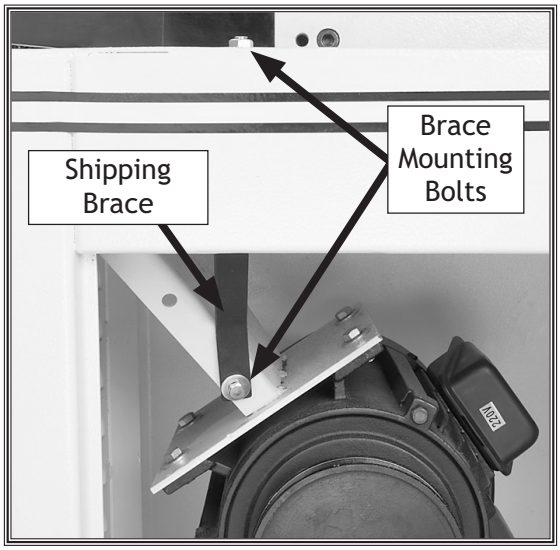


Figure 9. Shipping brace.

7. Place the belt onto the cutterhead pulley with the belt direction arrow pointing the direction of pulley rotation. When installed correctly, the internal belt tangs must be facing against the pulley rotation arrow shown in **Figure 10**.

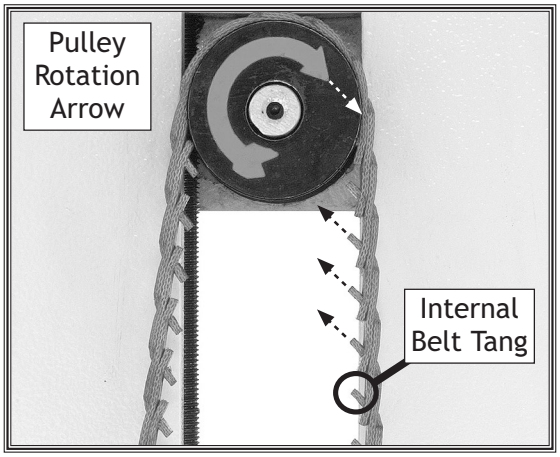


Figure 10. Installing the drive belt (belt cover removed for clarity).

8. Next, while keeping your fingers clear, lift the motor and roll the belt onto the motor pulley as shown in **Figure 11**.

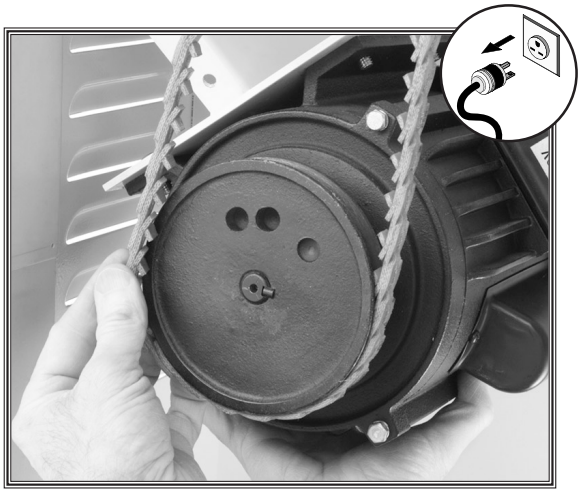


Figure 11. Installing the belt guard.

9. Attach the belt guard to the stand (**Figure 12**) with two $^{5}/_{16}$"-18 x $^{3}/_{4}$" hex bolts, four $^{5}/_{16}$" flat washers, and two $^{5}/_{16}$"-18 hex nuts.

10. Slide the handwheel hub over the shaft (**Figure 12**) and tighten the set screw with a 5mm hex wrench.

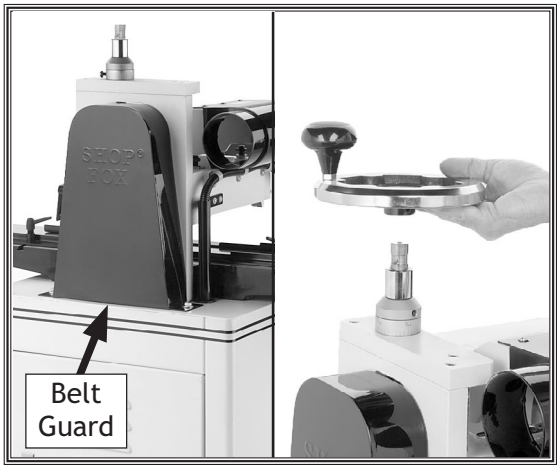


Figure 12. Installing the belt guard and the handwheel.

11. Feed the switch pedestal wiring harnesses into the cabinet through the hole in the cabinet and secure the switch pedestal to the cabinet (**Figure 13**) with three $^{5}/_{16}$"-18 x $^{3}/_{4}$" hex bolts and $^{5}/_{16}$" flat washers.

12. Plug the harnesses into their respective sockets just below the pedestal mounting.

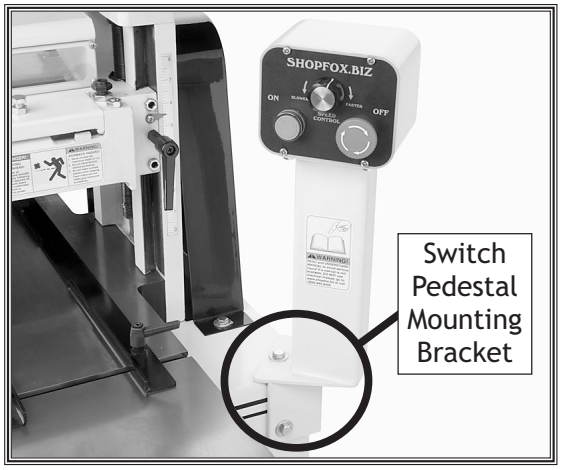


Figure 13. Switch pedestal installation.

13. Insert the feed motor wiring harness through the conduit and loom clamps, and then plug it into the motor.

14. Fasten the conduit mounting bracket (**Figure 14**) to the headstock with two $^{5}/_{16}$"-18 x $^{3}/_{8}$" flange screws.

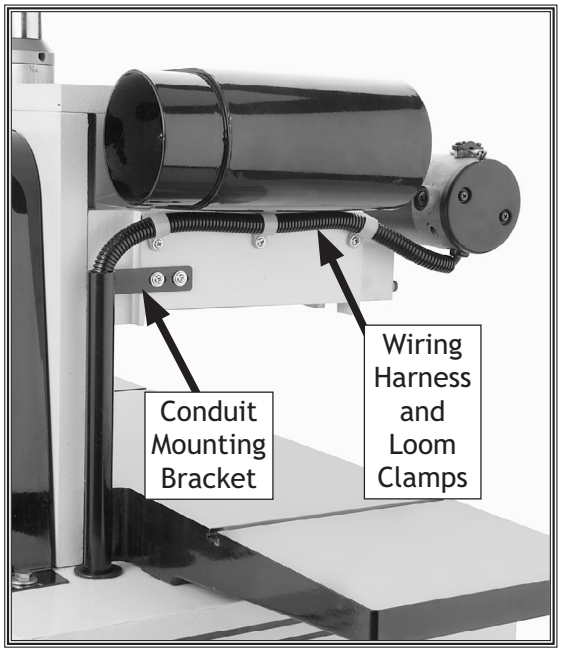


Figure 14. Conduit installation.

15. Install two T-nuts in each table slot (**Figure 15**).

16. Position the inner and outer guide rails so the elongated T-nut slots (**Figure 15**) are positioned on the infeed table.

17. Insert the lock levers through the guide rails, and then thread them into the T-nuts.

18. Snug the levers in place.

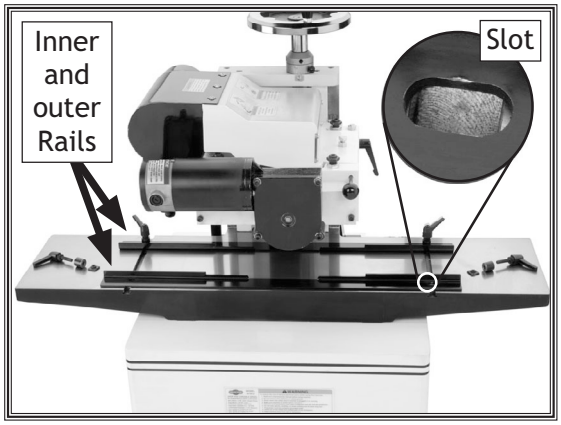


Figure 15. Rail installation.

19. Install the dust hood (**Figure 16**) with three #10-24 x 1/2" flange screws.

20. Install a 4" flexible dust collector suction hose to the dust port, as shown in **Figure 16.**

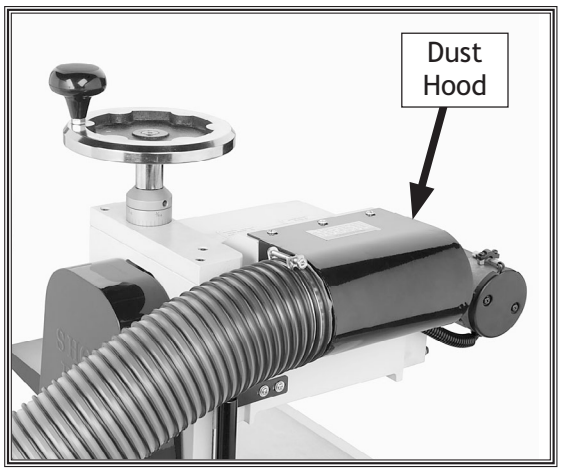


Figure 16. Installing the dust hood.

Dust Collection

Recommended CFM at Dust Port: ..... 400 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the number of branches or Y's, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you are unsure of your system, consult an expert or purchase a good dust collection "how-to" book.

⚠CAUTION

DO NOT operate this machine without an adequate dust collection system. This machine creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Test Run

If, during the test run, you encounter an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 42** for correction. If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

To test run the machine, do these steps:

1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the machine is setup properly.

2. Ensure all tools and objects used during setup are cleared away from the machine.

3. Use the elevation handwheel to raise the planer/moulder head to provide plenty of room for the safe operation of the feed rollers and the cutterhead.

4. Pull out the chip deflector retaining pin (**Figure 17**) and remove the chip deflector.

5. Wearing leather gloves, use a 14mm wrench to make sure the knives are tight, and rotate the cutterhead to make sure the knives do not hit the table.

6. Reinstall the chip deflector, and connect the machine to the power source.

7. Push the OFF button in, then turn it clockwise so it pops out (**Figure 18**) to ensure it resets.

8. Turn the speed control dial (**Figure 18**) counterclockwise to its slowest setting, then push the ON button and the main motor will start.

9. Turn the speed control dial clockwise to operate and speed up the feed rollers.

10. Press the OFF button to stop the machine.

11. WITHOUT resetting the OFF switch, press the ON button. The machine should not start.

    — If the machine does not start, the OFF button safety feature is working correctly.

    — If the machine starts, immediately disconnect the machine from power. The OFF button safety feature is at fault and must be replaced before using this machine.

WARNING

Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses to reduce the risk of injury.

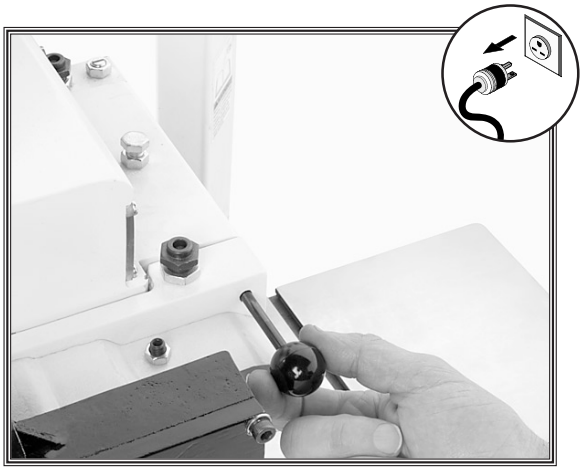


Figure 17. Removing the chip deflector.

Figure 18. Control panel.

SETUP

OPERATIONS

General

This machine will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. **If at any time you are experiencing difficulties performing any operation, stop using the machine!**

If you are an inexperienced operator, we strongly recommend that you read books or trade articles, or seek training from an experienced planer/moulder operator before performing any unfamiliar operations. **Above all, your safety should come first!**

Before proceeding with this operation section, see **Figure 19** to familiarize yourself with the locations and names of the planer/moulder controls.

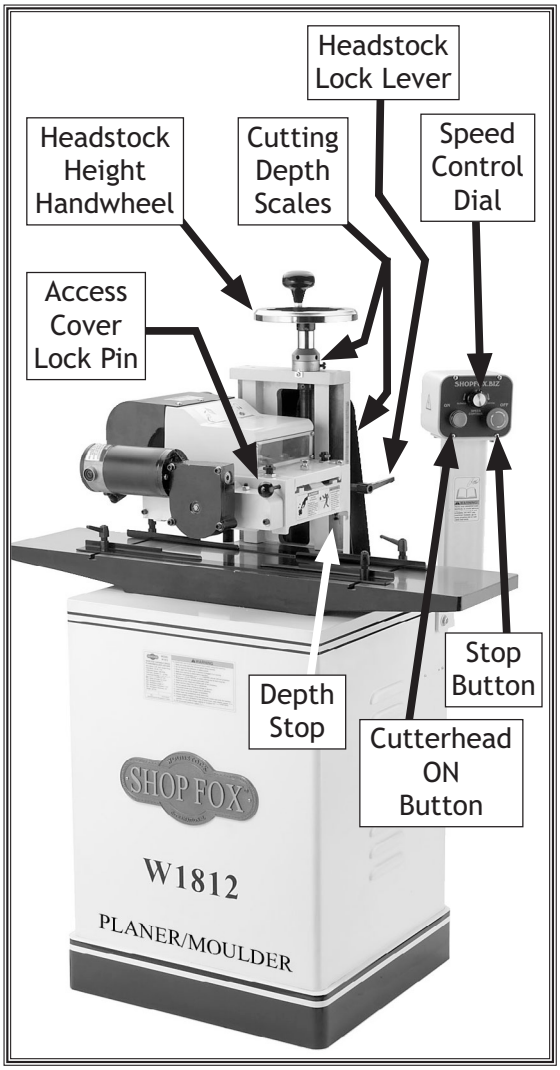


Figure 19. Machine controls.

⚠WARNING

READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. DO NOT risk your safety by not reading!

⚠WARNING

Always wear safety goggles, respirator, and hearing protection when operating this machine. Ignoring this warning may lead to severe injury.

Installing Planing Knives

⚠CAUTION

WEAR thick gloves and use extreme caution when working near cutting surfaces. Planer knives are dangerously sharp! Failure to exercise care while working near knives could result in severe injury.

To install the planing knives, do these steps:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!
2. Pull the pin shown in **Figure 20**, and remove the chip deflector.
3. Put on heavy leather gloves, and use a 14mm wrench to remove the knife bolts, washers, and any knives (if installed).
4. Remove any dust, wood chips, or pitch from the cutterhead where the planing knife will seat.
5. Place the new planer blade against the cutterhead lip with the beveled side of the blade facing up, as shown in **Figure 21**.
6. Line up the holes in the planer blade and the cutterhead, and install a 3/8"-16 x 1" knife bolt and 3/8" flat washer in each of the upper hole positions shown in **Figure 21**. Make sure to keep the planer blade seated against the cutterhead lip while tightening the bolts.
7. Visually inspect to make sure that the planer blade did not move away from the cutterhead lip (**Figure 22**) during the tightening process. If so, reinstall the blade until it is correctly seated.
8. Rotate the cutterhead and install the other planer blade.
9. Set the depth stop (**Figure 19**) to maintain planer blade to table clearance.
10. Adjust the feed rollers and spring tension as outlined in **Feed Roller Height** and **Spring Tension** on **Page 21**.

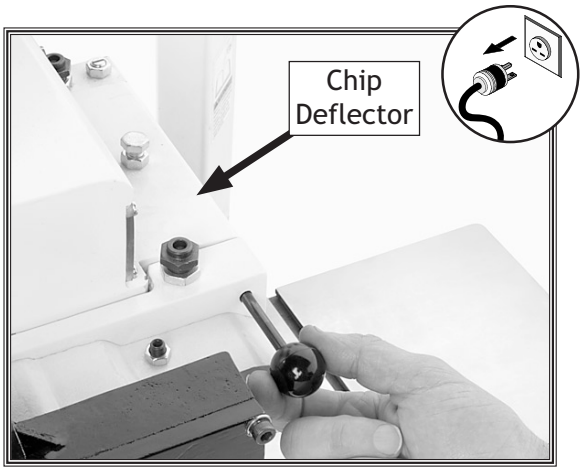


Figure 20. Removing the chip deflector.

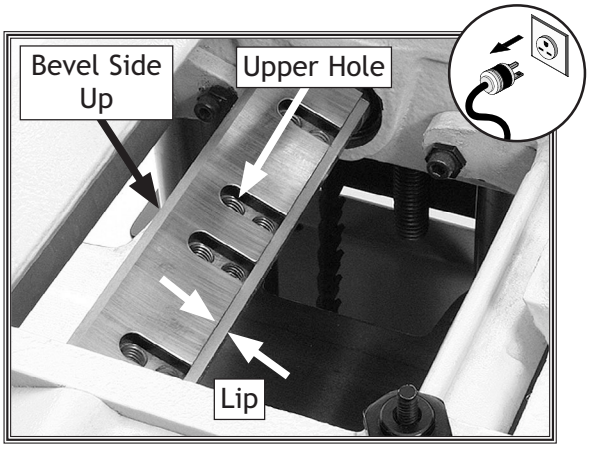


Figure 21. Installing a planer blade.

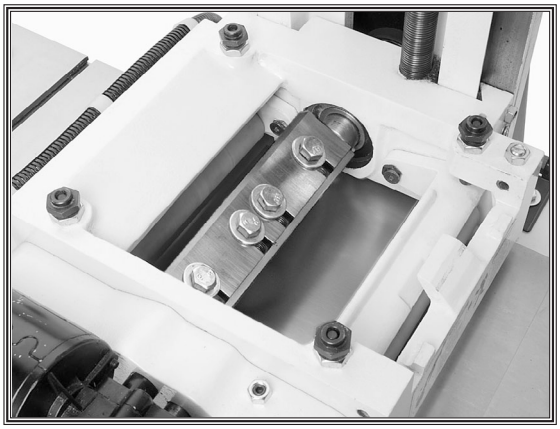


Figure 22. Planer knives installed.

Installing Moulding Knives

⚠CAUTION

REMEMBER, moulding knives have many different profiles, before starting the machine, always verify that the moulding knives do not contact any part of the workpiece guide rails, feed roller swing arm, or the table surface. **Failure to verify knife clearance may result in severe injury and machine damage!**

To install moulding knives, do these steps:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!
2. Pull the pin shown in **Figure 23**, and remove the chip deflector.
3. Put on heavy leather gloves, and use a 14mm wrench to remove the knife bolts, washers, and any knives (if installed).
4. Remove any dust, wood chips, and pitch from the cutterhead knife seat and lip (**Figure 24**).
5. Place the moulding knife against the cutterhead lip with the beveled side of the blade facing up (**Figure 24**), and in the inboard position (**Figure 25**) leaving only one set of holes (**Figure 25**). Should you for any reason need to position moulding knives on the outboard position of the cutterhead, you must leave one set of holes exposed if the at that end also.
6. Line up the holes and secure the knife to the cutterhead with the knife bolts and washers (**Figure 25**).
7. Make sure the knife did not move away from the cutterhead lip when tightened, then rotate the cutterhead to the bottom.
8. Install the other moulding knife.
9. Set the guide rail alignment for clearance, and set the depth stop to maintain moulding knife to table clearance.
10. Adjust the feed rollers and spring tension as outlined in **Feed Roller Height** and **Spring Tension** on **Page 21**.

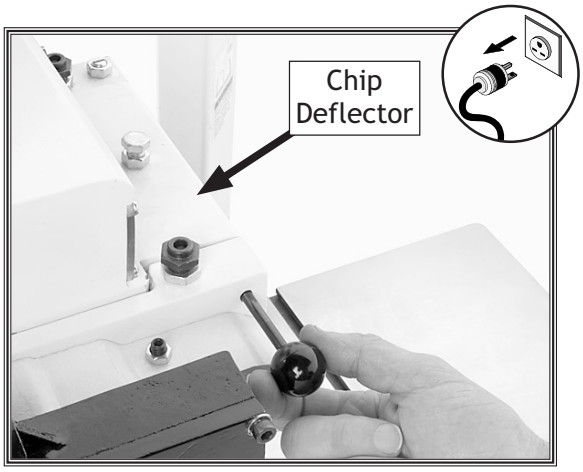


Figure 23. Removing the chip deflector.

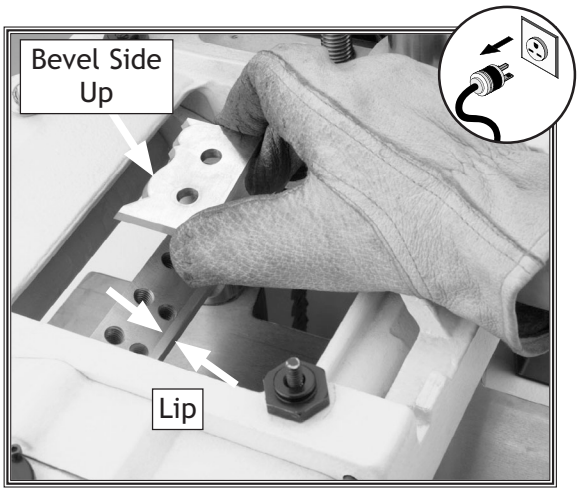


Figure 24. Moulding knife installation.

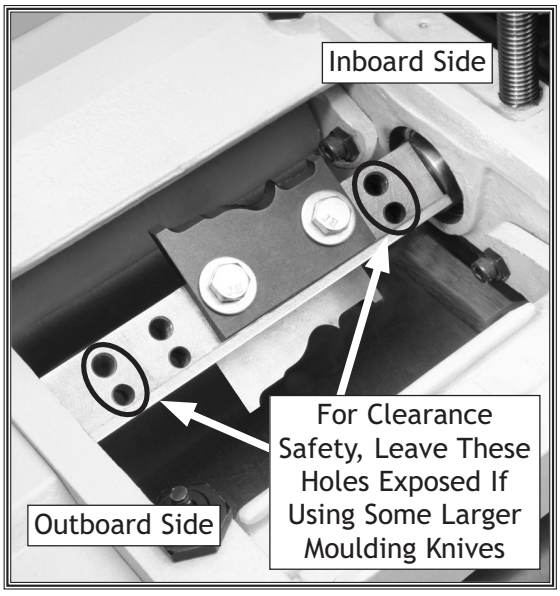


Figure 25. Knives positioned inboard.

Feed Roller Height and Spring Tension

After switching between planing and molding operations, you must re-adjust the feed roller height and spring tension. Feed roller height and spring tension keeps the workpiece feeding into the planer/moulder without chatter or slipping. Rollers that are too high, or spring tension that is too light, can cause the workpiece to chatter and slip. Rollers that are too low, or spring tension that is too heavy, can cause the workpiece to hang on initial feed, cause rapid feed system wear and increase workpiece snipe. The settings below are close to what you will need to use, but some trial-and-error on height and spring tension will be required for best results.

To adjust the feed roller spring tension, do these steps:

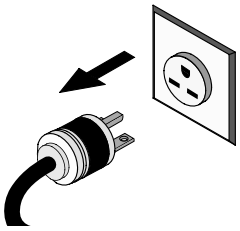
1. DISCONNECT THE PLANER/MOULDER FROM POWER!

2. Loosen the feed-roller stop jam nuts and rotate the eccentric stops with a 5mm hex wrench until the rollers lower to the required level:

   —For planing, lower the roller so it is approximately 1mm below the lowest sweep of the planing knife.

   —For moulding, lower the roller so it is approximately $^{3}/_{16}$" below the highest point of the moulding knife profile. Refer to **Figure 27** to study and find the highest point of the moulding knife profile when the knife is at the lowest point of its sweep.

WARNING



MAKE SURE that your machine is unplugged during all adjustment procedures! If this warning is ignored, serious personal injury may occur.

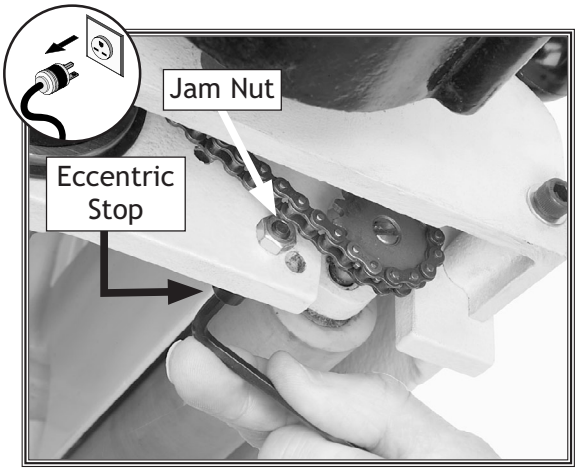


Figure 26. Feed roller height adjustment.

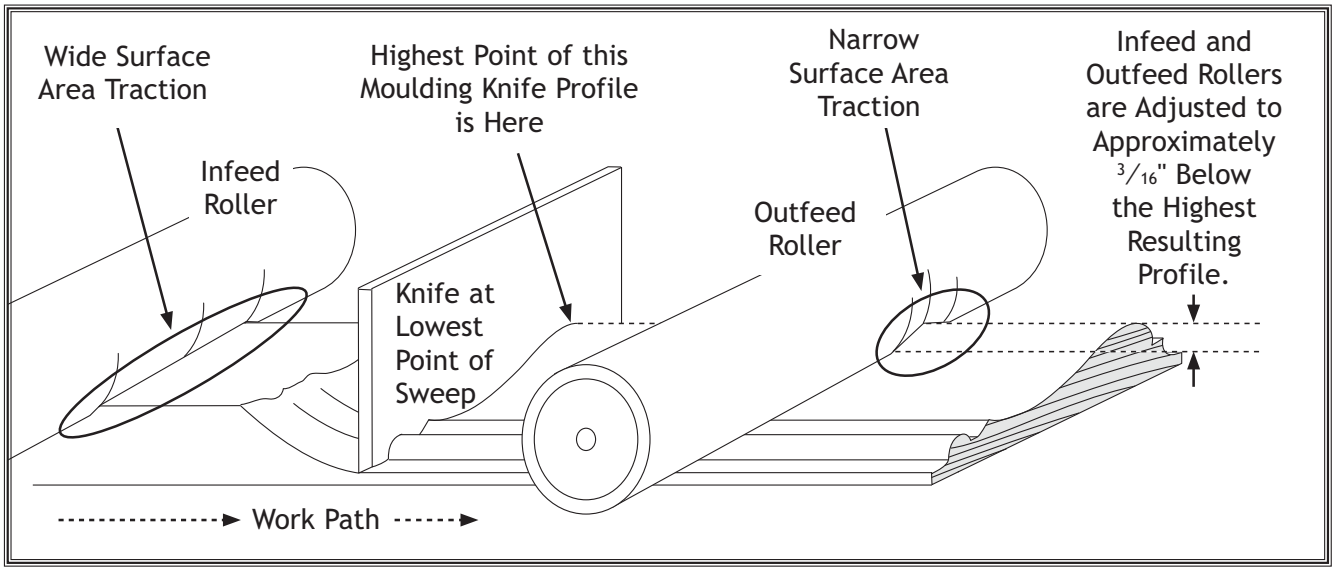


Figure 27. Feed roller height concept for moulding knife use.

—If a certain moulding knife profile does not allow you to adjust the outfeed roller down far enough for proper roller traction, the eccentric stop must be repositioned to the lower hole. To do this, remove the jam nut (**Figure 28**), reposition the eccentric stop (**Figure 29**) in the lower hole, and finger tighten the jam nut. Next rotate the eccentric stop to lower or raise the roller and retighten the jam nut.

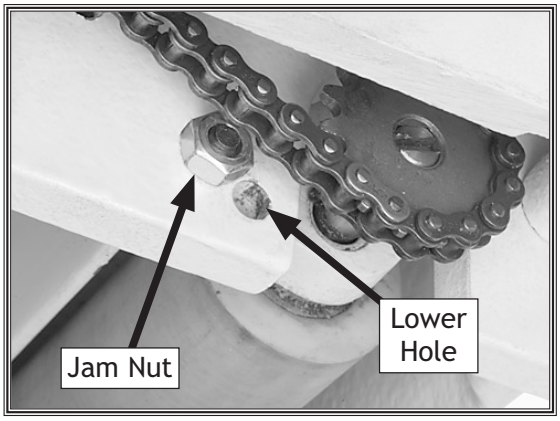


Figure 28. Feed roller stop adjustment.

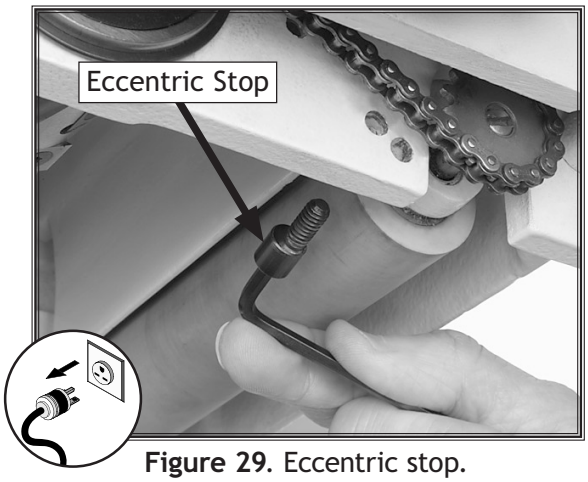


Figure 29. Eccentric stop.

3. Loosen and back off the four spring tensioner jam nuts (**Figure 30**) completely, and unthread the tensioner assemblies until you are sure that they are not touching the springs.

4. Thread the tensioners back into the housings until you feel the tensioner just contact the springs.

5. Give each tensioner approximately two full turns to preload the springs and tighten the jam nuts.

6. Reinstall the chip deflector.

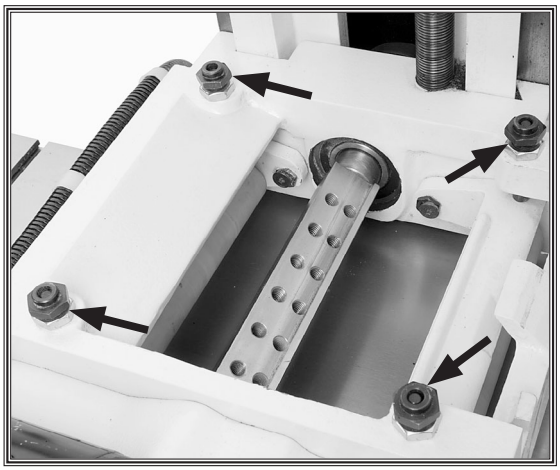


Figure 30. Feed roller tension adjustment.

Workpiece Inspection

Before using this planer/moulder, inspect each and every workpiece for the following problems, and be familiar with the hardness of the wood workpiece.

- Each workpiece must have at least one flat surface to slide along the planer/moulder table. To create a flat surface, pass the workpiece over a jointer (**Figure 31**). Defects such as twisting, loose knots or severe cracks may make the stock unusable.
- When possible, square up stock before moulding. Plane equal amounts on each side of the board to reduce the chance of twisting or cupping.
- Recognize the workpiece density. Planing is more difficult in hard species of wood and may require several shallow cuts to reach the desired thickness. **Figure 32** lists the hardness of many common woods based on shear strength.
- Only use clean lumber. Scrape off all glue from joined boards before processing. Remove all dirt, nails, staples, imbedded gravel, etc. from any workpiece you plan on using. Metal or gravel in a workpiece will instantly damage the knives.
- Avoid processing a workpiece with a high moisture content. Wood with more than 20% moisture, or wood that has been exposed to rain or snow, will cut poorly and cause unnecessary wear on the knives and motor.
- Process ONLY wooden workpieces. Never process particle board, plywood, MDF, laminates, or other synthetic materials.
- Feed wood in the same direction as the grain. Never feed end-cut or end-grained lumber into the planer/moulder.

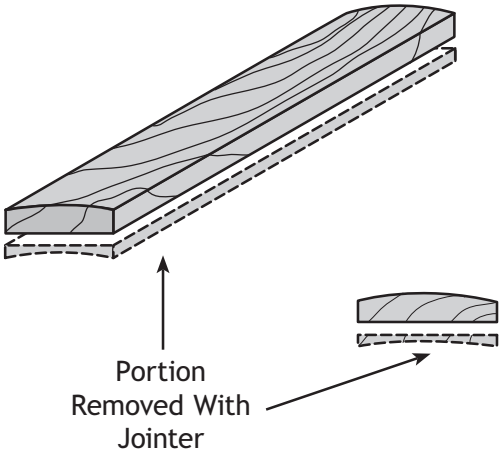


Figure 31. Face joint the concave side of cupped workpiece before milling.

	TYPE	SHEAR (PSI)
HARD	Black Locust	2,480
	Sugar Maple	2,330
	Pecan Hickory	2,080
	White Oak	2,000
	White Ash	1,950
	Black Cherry	1,700
	American Elm	1,510
	Black Walnut	1,410
	Red Alder	1,370
	Basswood	1,280
	Cottonwood	1,160
	Western Larch	1,150
	Tamarack	1,130
	Douglas Fir	1,080
	Alaska Cedar	1,050
	Sitka Spruce	1,000
	Sugar Pine	980
	Cypress	940
	Redwood (OG)	930
	Red Cedar	860
	White Pine	850
SOFT	Balsam Fir	710

Figure 32. Wood density table.

Planing Do's and Don'ts

There are some common planing mistakes that must be avoided when planing.

Multiple Board Hazard

Only plane one board at a time (**Figure 33**). Whether you use guide rails or not, never attempt to plane more than one board at a time side-by-side. If one board is slightly lower that the other, the feed roller will only hold the highest board, while the lower board will be free to slip when the knife contacts it. This hazardous situation can result in one board being ejected from the machine, causing serious injury.

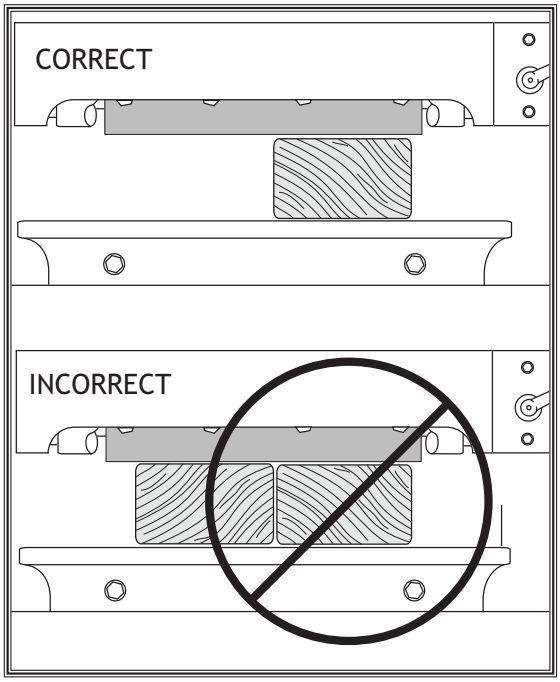


Figure 33. Only plane one board at a time.

Sacrificial Table Use

If using a sacrificial table, you must clamp it to the cast iron table (**Figure 34**) to prevent workpiece ejection. Never stack two boards on top of one another and feed them both into the planer/moulder to compensate for a workpiece that may be too thin. Planing with two loose stacked boards can result in workpiece ejection, causing injury.

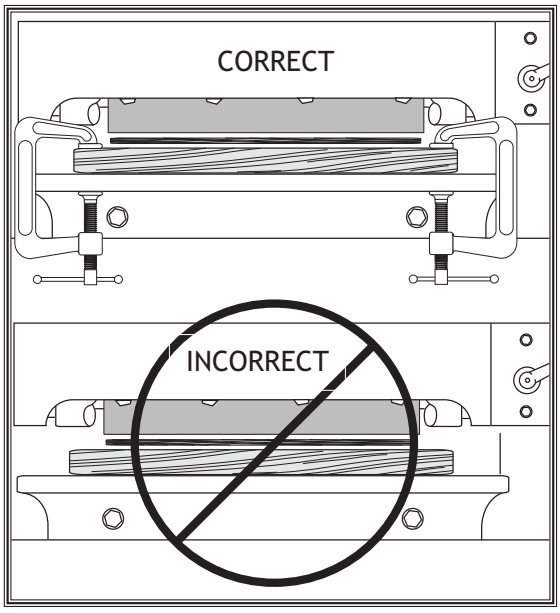


Figure 34. Sacrificial table mounting.

Planing Operation

The maximum cutting depth for soft wood at full cutterhead width is no more than 1/8" deep. The harder the wood, the shallower the cutting depth and the slower the feed rate should be. A series of light passes typically results in a smoother finish with less snipe.

The basic steps of operating the machine as a planer are as follows:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!

2. Review the **Workpiece Inspection** list on **Page 23** and the **AVOIDING KICKBACK** warning on this page.

3. Review **Planing Do's and Don'ts** on **Page 24**, and take the appropriate safety measures.

4. If you have not already done so, adjust the feed rollers and spring tension as outlined in the **Feed Roller Height and Spring Tension** section on **Page 21**.

5. Measure the workpiece thickness, loosen the headstock lock lever, and use the handwheel (**Figure 35**) to adjust the headstock for a light pass.

6. Wearing gloves, manually rotate the cutterhead to make sure that the knives do not contact the table or guide rails if used.

7. PUT ON SAFETY GLASSES, EAR PROTECTION, AND A RESPIRATOR.

8. Tighten the headstock lock lever, start the machine, and turn the feed speed control dial to a medium speed.

9. Stand clear of the workpiece path, place the flat side of the board down on the table, and slowly feed the workpiece into the machine until the feed roller begins to pull the workpiece.

10. For subsequent passes, adjust the headstock height and feed rate as necessary until the desired thickness and finish is achieved.

    Note: *To reduce snipe, feed multiple pieces of stock butted up end-to-end, or experiment with a lighter feed roller spring tension. You can also try to raise one or both feed rollers up slightly.*

⚠WARNING

AVOIDING KICKBACK!

- **Always stand to one side of the machine.**
- **DO NOT plane more than one piece at a time.**
- **Always plane WITH the grain direction of the wood. Never plain cross-grain or end-grain.**
- **DO NOT remove more than 1/8" of material on each pass.**
- **Support the workpiece on both ends. Get assistance if you are planing long lumber, or use roller stands to support the workpiece.**
- **Carefully inspect all stock to make sure it is free of large knots or foreign objects that may damage your blades.**

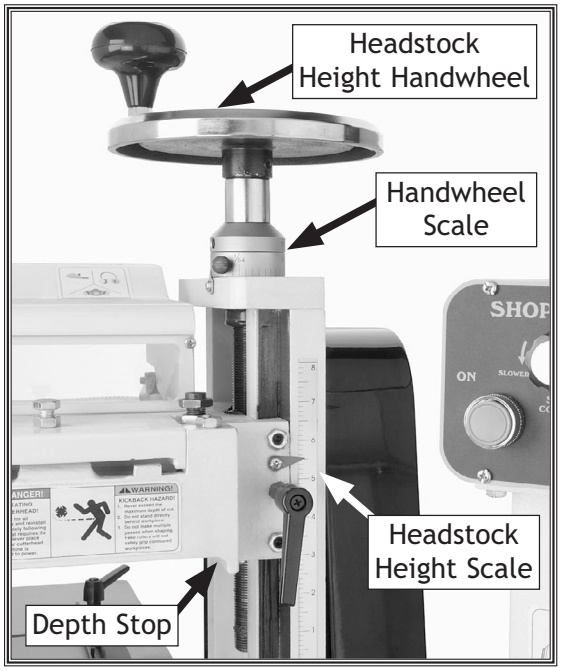


Figure 35. Depth control and scales.

Moulding Do's and Don'ts

The Model W1812 will accommodate most moulding knife profiles. However, you still must pay special attention to workpiece support and knife-to-table clearance. Refer to the following examples to avoid common workpiece setup mistakes.

⚠CAUTION

REMEMBER, moulding knives have many different profiles, before starting the machine, always verify that the moulding knives do not contact any part of the workpiece guide rails, feed roller swing arm, or the table surface. **Failure to verify knife clearance may result in severe injury and machine damage!**

Edge Forming Knife Clearance

A wooden sacrificial table clamped to the cast iron table and a three-piece guide system (**Figure 36**) will prevent tool and table damage by absorbing the full sweep of the knife.

Never attempt to use edge forming profile knives without pre-installing a wooden sacrificial table. Often these types of knives sweep lower than the workpiece and will contact the table, causing severe machine damage or personal injury.

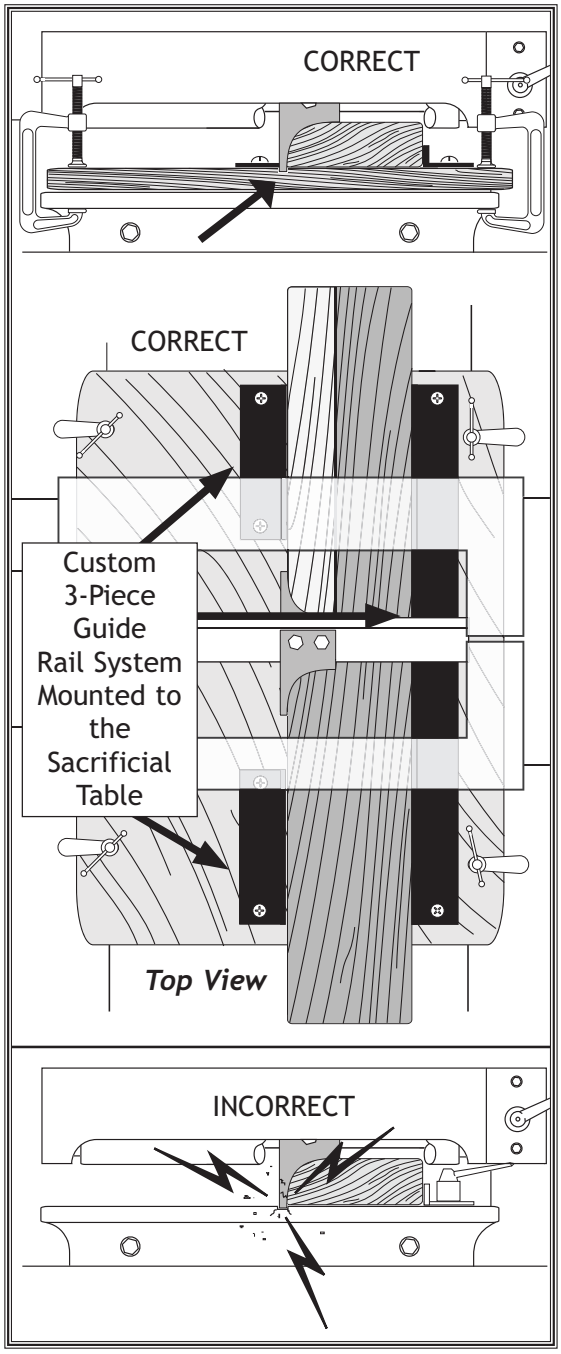


Figure 36. Edge forming profile hazards.

PARTS

Crown Moulding Support

When cutting crown moulding (**Figure 37**), make a wooden V-track that can be clamped to the table. The V-track must support at least 50% of the workpiece height on both sides.

Do not use the guide rails that came with your machine for crown moulding support. If you do, the workpiece can dislodge and be ejected from the machine, causing severe injury or damage.

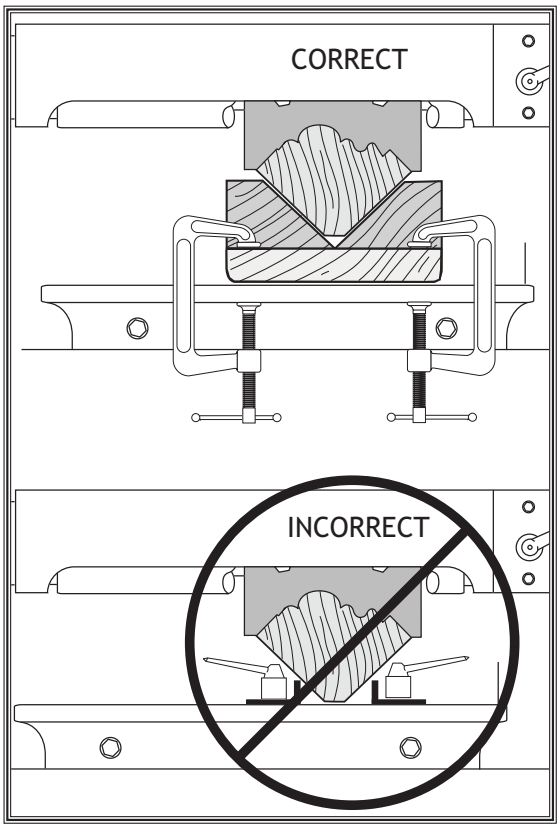


Figure 37. Crown moulding track.

Knife Positioning

Depending on the knife profile and the hardness of the workpiece, to minimize the potential for vibration and chatter marks on the workpiece, install moulding knives closer to column rather than farther away (**Figure 38**).

⚠CAUTION

REMEMBER, moulding knives have many different profiles, before starting the machine, always verify that the moulding knives do not contact any part of the workpiece guide rails, feed roller swing arm, or the table surface. **Failure to verify knife clearance may result in severe injury and machine damage!**

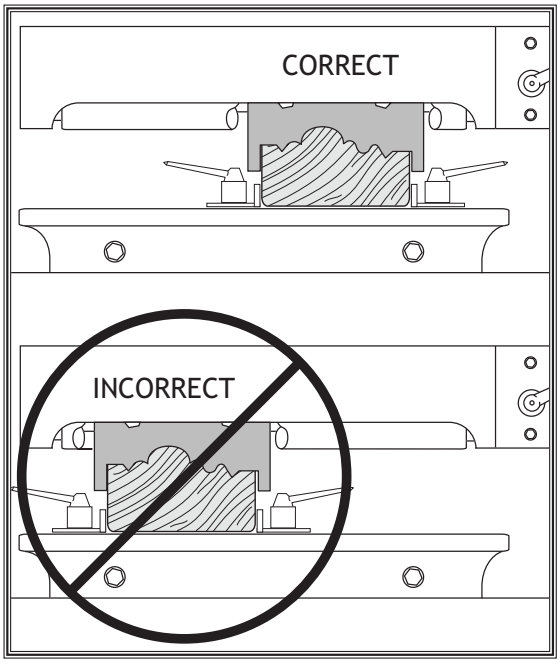


Figure 38. Knife positioning.

Size Workpiece Appropriately

Make sure to cut your workpiece to the correct width for the knife being used (**Figure 39**). To improve knife life and workpiece results when cutting in very hard woods, use a table saw to rabbet out some of the profile before running the workpiece into the planer/moulder.

Never cut into moulding that is wider than the knife. Otherwise, the knife will overheat, burn the wood, and dull rapidly.

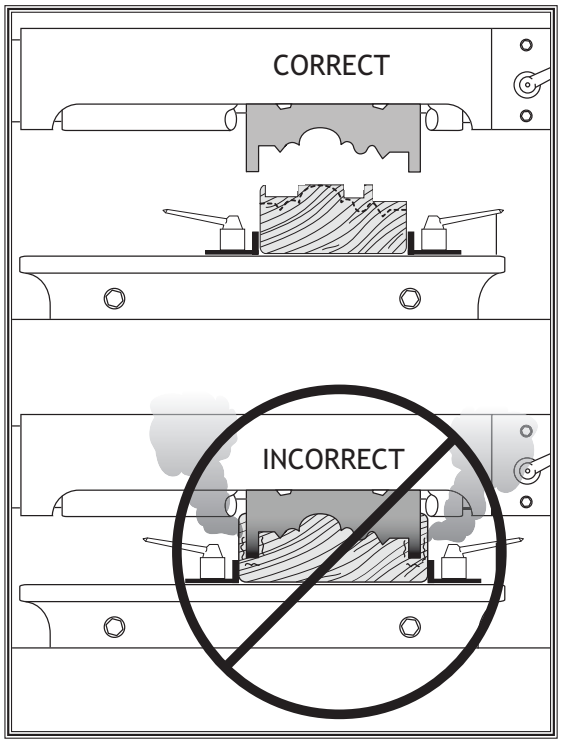


Figure 39. Correct workpiece sizing.

Always Use Guide Rails When Moulding

Make sure to use the guide rails (**Figure 40**), so the moulding profile can be cut with maximum safety and without wander, twisting, or profile misalignment.

Do not attempt to cut moulding without using the guide rails. Otherwise the workpiece could shift and be ejected from the machine and cause severe injury, or the moulding pattern could be inconsistent from one strip of molding to another.

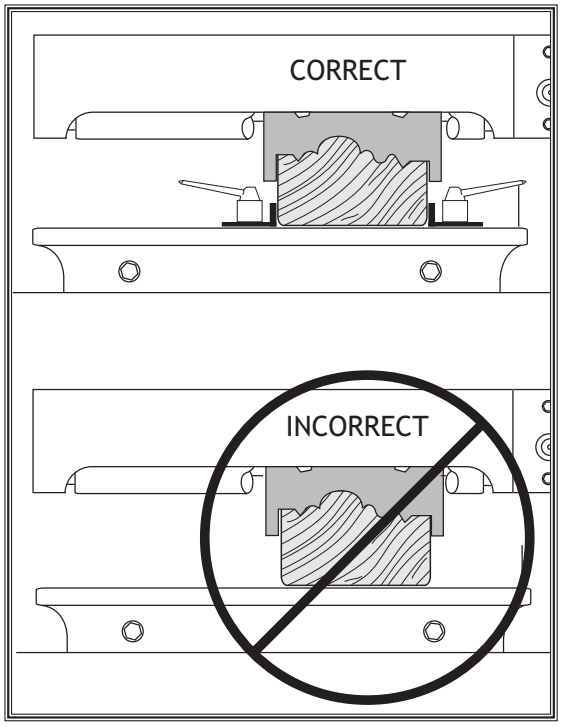


Figure 40. Using the guide rails.

Edge Moulding Tall Workpieces

When cutting edge profiles on workpieces that are taller than they are wide, you must clamp wooden extension rails to the table so they support at least 75% of the workpiece height on both sides (**Figure 41**).

Never attempt to use the low profile metal guide rails that came with this machine if they do not adequately support the workpiece, such as with tall workpieces. If the workpiece slips out of rails because the rails are too low, the workpiece can be ejected from the machine causing severe injury.

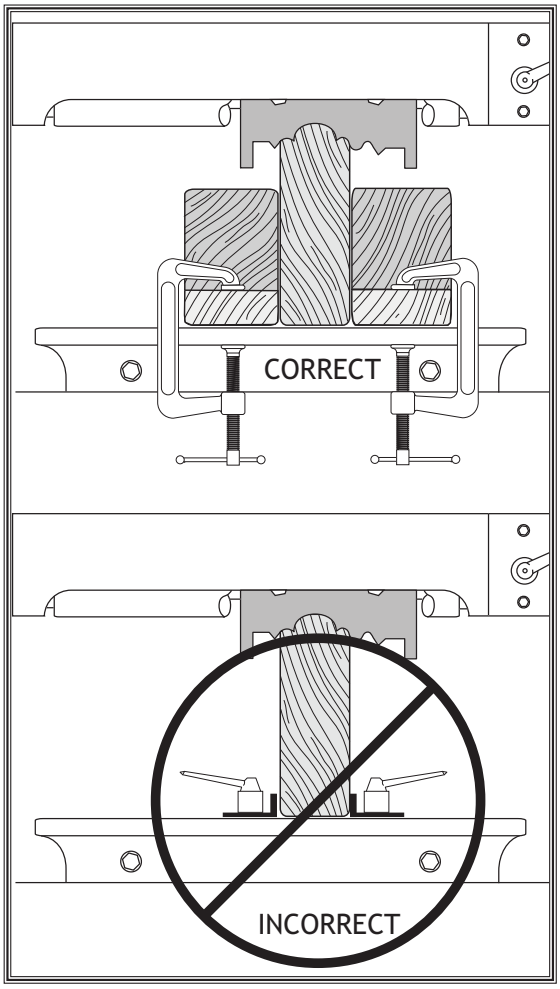


Figure 41. Correct workpiece support.

Moulding Operation

The maximum depth for a moulding cut in soft wood is 3/4" deep. However, the harder the wood or the more knots it has, the shallower the cut, and the slower the feed rate must be.

The basic steps of operating the machine as a moulder are as follows:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!

2. Review the **Workpiece Inspection** list on **Page 23** and the **AVOIDING KICKBACK** warning on this page.

3. Review **Moulding Do's and Don'ts** on **Page 26**, and take the appropriate safety measures.

4. Adjust the guide rails against the sides of the workpiece so the workpiece is guided into the planer blades without binding, then tighten the rail lock levers.

5. If you have not already done so, adjust the feed rollers and spring tension as outlined in the **Feed Roller Height and Spring Tension** section on **Page 21**.

6. Loosen the headstock lock lever, and use the handwheel (**Figure 42**) to adjust the headstock down far enough to make a full pass.

7. Put on heavy leather gloves and rotate the cutterhead manually to verify that the knives do not contact the table or the guide rails.

8. PUT ON SAFETY GLASSES, EAR PROTECTION, AND A RESPIRATOR.

9. Turn the feed speed control dial to a slow speed and start the machine. Finding the best feed rate will be a process of trial-and-error based on finding a balance between the wood type, moulding knife profile, and the quality of finish desired.

10. Stand to the side of the table, place the workpiece on the table, and slowly feed it into the machine until the feed roller begins to pull the workpiece.

⚠WARNING

AVOIDING KICKBACK!

- **Always stand to one side of the machine.**
- **Always check and reset outfeed roller height after changing knives.**
- **Always plane WITH the grain direction of the wood. Never plain cross-grain or end-grain.**
- **Do not make a second pass after cutting the initial profile. The first pass has full roller-to-workpiece contact, but on the second pass, both the infeed and outfeed rollers have minimum contact and the workpiece may be ejected.**
- **Use roller stands to support long workpieces.**
- **Carefully inspect all stock to make sure it is free of large knots and foreign objects.**

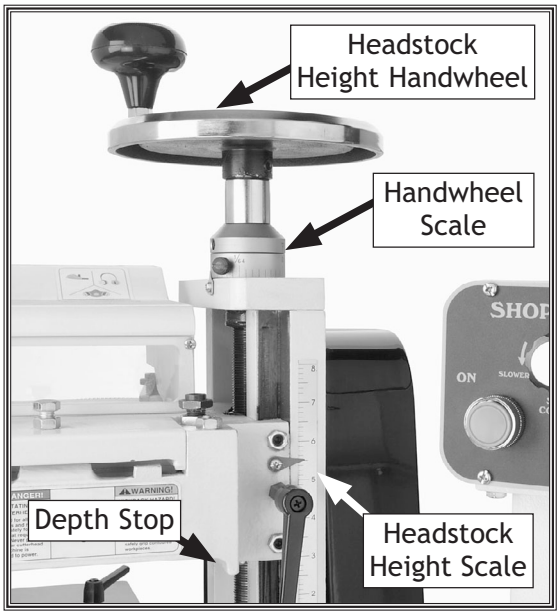


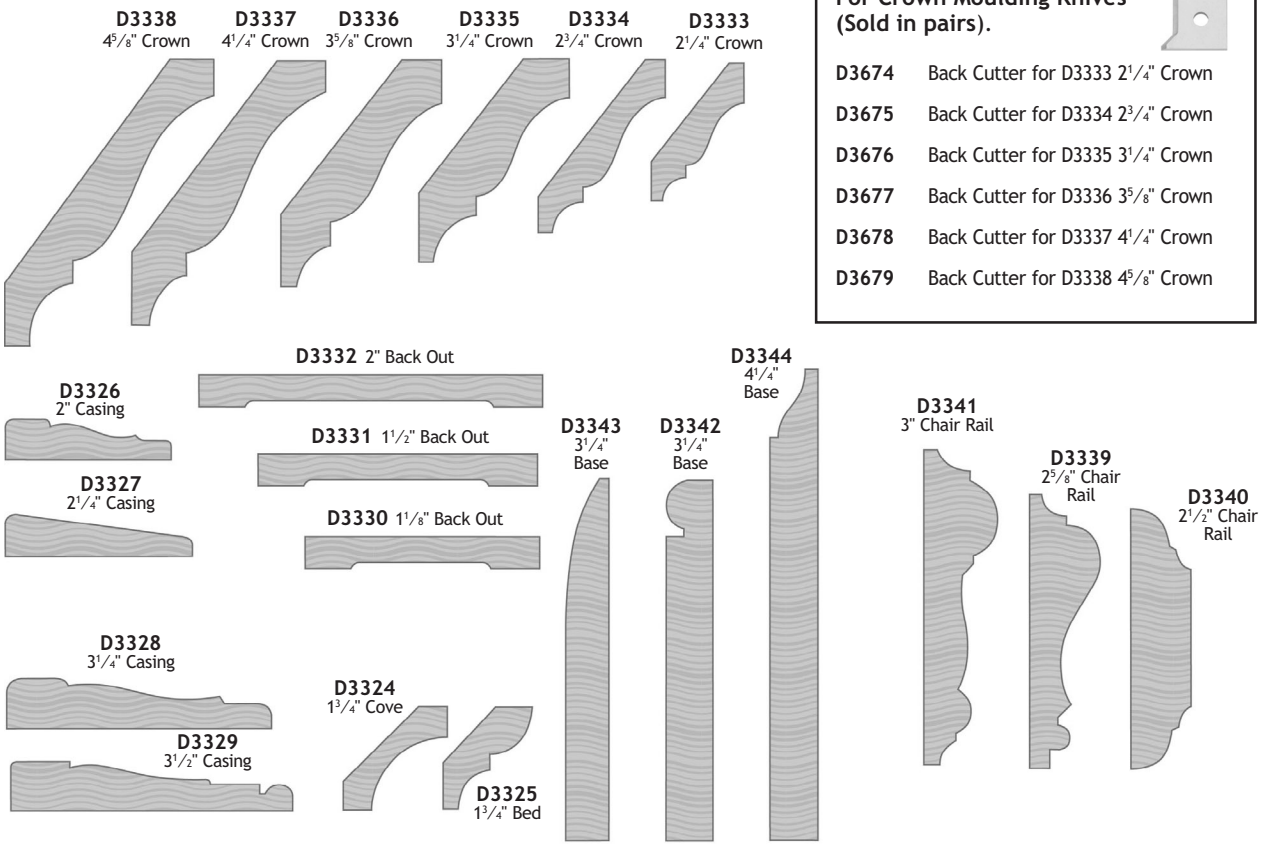
Figure 42. Depth control and scales.

ACCESSORIES

The following planer/moulder accessories may be available through your local Woodstock International Inc. dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: 1-800-840-8420 or at sales@woodstockint.com.

Moulding Knives

This selection of HSS Moulding Knives fits our Shop Fox® Planer/Moulders. Each moulding profile includes a set of two indexable knives, so knife setting is quick and easy.



BACK CUTTERS

For Crown Moulding Knives (Sold in pairs).

D3674	Back Cutter for D3333 2 1/4" Crown
D3675	Back Cutter for D3334 2 3/4" Crown
D3676	Back Cutter for D3335 3 1/4" Crown
D3677	Back Cutter for D3336 3 5/8" Crown
D3678	Back Cutter for D3337 4 1/4" Crown
D3679	Back Cutter for D3338 4 5/8" Crown

Model D3393—Elliptical Jig

This jig enables the Model W1812 Planer/Moulder to make extremely high quality arched casings and mouldings to match the same straight moulding profiles produced by this machine. Ideal for round-top windows and arched doorways that are characteristic of custom woodwork. This jig requires a shop-made 3/4" thick template of the same arc or radius as the workpiece. Maximum width capacity is 5 1/2".

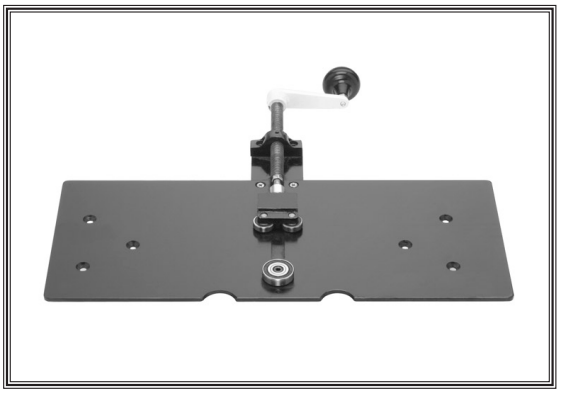


Figure 43. Model D3393 elliptical jig.

OPERATIONS

W1735—Dust Collector
A perfect dedicated dust collector for a planer/moulder on a job site or in a shop. The motor is 3/4 HP, 110V, single-phase; and the flow specifications are 650 CFM with a static pressure of 3.4" H_2O. The bag capacity is 2.8 cubic feet with a filtration level down to 30-micron.

Figure 44. W1735 dust collector.

W1049—Large Dust Collection Separator
Our Dust Collection Separator increases the chip collection capacity of dust collection systems that are rated 800 CFM or greater. Designed to fit securely on top of a standard 30-gallon metal trash can, this molded ABS fitting is engineered to use cyclonic action to drop out larger particles from the dust flow. The fitting features molded inlets and outlets that can be easily connected to standard systems using 4" flexible hose. You'll be amazed at how well it works!

Figure 45. W1049 large dust collection separator.

Model D2273—Single Roller Stand
Large diameter ball bearing roller stand features smooth operation for a variety of processing and work support applications. Heavy pedestal base is stable and secure.

Model D2274—5 Roller Stand
For greater work stability and support, this 5 roller stand features large diameter, ball bearing rollers mounted on a sturdy adjustable pedestal base.

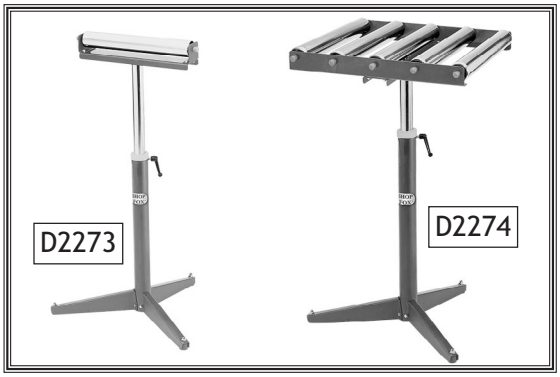


Figure 46. Models D2273 and D2274 Shop Fox roller stands.

D2057—Heavy-Duty Shop Fox Mobile Base
Make your machine mobile with this popular patented mobile base. The unique outrigger type supports increased stability and lower machine height. This heavy duty mobile base is rated for up to a 600 lb. capacity.

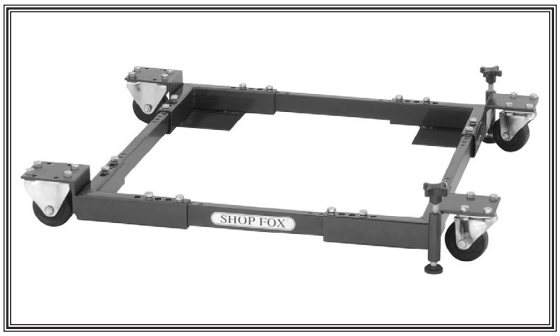


Figure 47. D2057 Shop Fox mobile base.

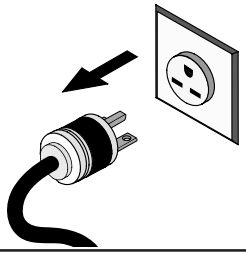
MAINTENANCE

General

Regular maintenance on your machine will ensure its optimum performance. Make a habit of inspecting your machine each time you use it.

- Loose mounting bolts.
- Worn switch, damaged cords, and plugs.
- Damaged V-belt.
- Any other unsafe condition.

⚠WARNING



MAKE SURE that your machine is unplugged during all maintenance procedures! If this warning is ignored, serious personal injury may occur.

Cleaning

Frequently vacuum sawdust away from the internal working parts of the machine and motor fan cover. Dust build-up around the motor is a sure way to decrease its lifespan.

Occasionally it will become necessary to clean the internal parts with mineral spirits and a stiff brush. Make sure the internal workings are dry and have been re-lubricated before using the machine again. When using mineral spirits and cleaners, do not allow them to contact the viewing window or it may become etched and cloudy. Remove the chip deflector, and use only warm water with a mild dish soap to clean the window. Do not let water come in contact with metal parts or rust may occur.

Cleaning Feed Motor

Every three months, we recommend that the motor dust cover (**Figure 48**) is removed, and the motor is vacuumed out for maximum motor life. Under heavy-use, increase the cleaning interval. DO NOT blow dust out with compressed air!

Figure 48. Feed motor dust cover.

Table and Base

Tables can be kept rust-free with regular applications of products like SLIPIT®. For long term storage you may want to consider products like Boeshield T-9™.

Lubrication

Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced.

However, this machine does need lubrication in other places, such as those shown in **Figures 49—51**. At a minimum, lubricate these areas every six months, but under heavy use or adverse working conditions, increase lubrication intervals accordingly.

To lubricate the machine, do these steps:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!

2. Record the height of each tensioner nut (**Figure 49**), and unthread each feed-roller spring tensioner assembly.

3. Clean the spring tensioner assembly with mineral spirits, apply a thin layer of light machine oil or motor oil, and reinstall to the recorded height or spring tension.

4. Place the nozzle under the chain housing, and vacuum out all dust. Then brush a coat of light machine oil or motor oil on the drive chains (**Figure 50**).

5. Clean the column ways and leadscrew with mineral spirits, and brush a coat of light machine oil or motor oil on all cleaned locations (**Figure 51**).

6. Apply a few drops of light machine oil or motor oil onto the gib at the top, so the oil drains down inside the gib seat, keeping the gib lubricated.

7. Apply a few drops of light machine oil or motor oil onto the handwheel scale hub, and work the hub to make sure that it draws the oil down inside.

8. Wipe away excess oil with a clean rag.

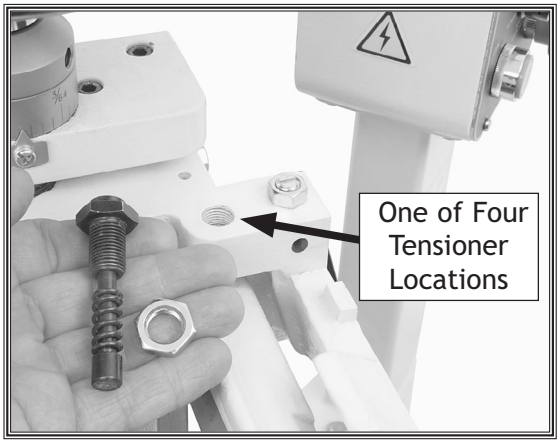


Figure 49. Roller spring tensioner assembly.

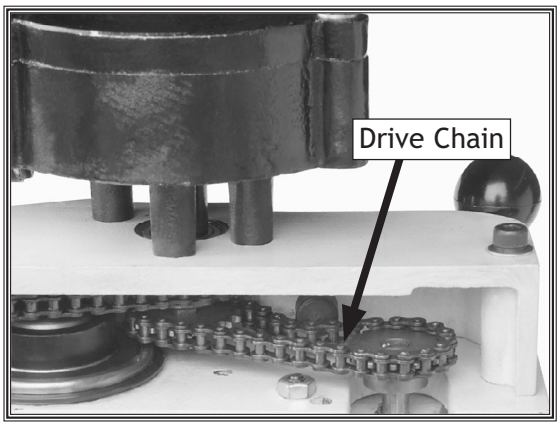


Figure 50. Drive chain assembly.

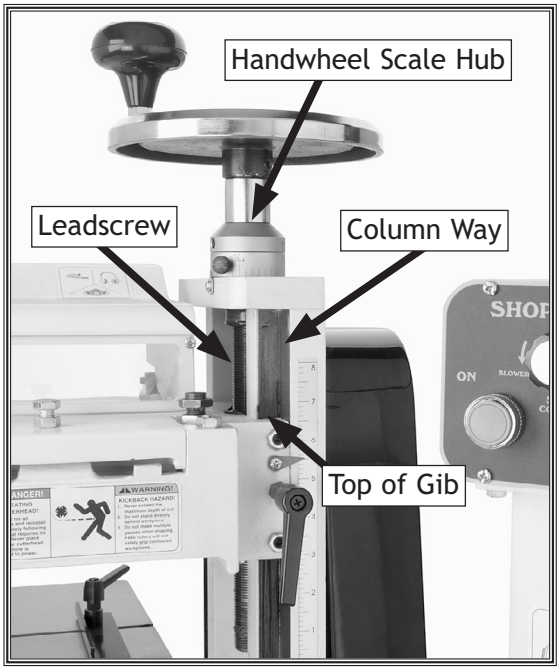


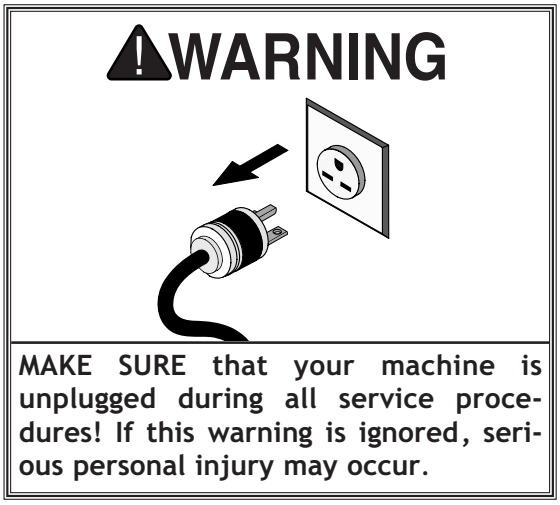
Figure 51. Gib, way, and leadscrew.

SERVICE

General

This section covers the most common service adjustments or procedures that may need to be made during the life of your machine.

If you require additional machine service information not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send an e-mail to: **tech-support@shopfox.biz**.



MAKE SURE that your machine is unplugged during all service procedures! If this warning is ignored, serious personal injury may occur.

Changing Feed Motor Brushes

If the feed motor fails, is noisy, warmer than usual, or appears to run sluggishly, the brushes may need to be replaced.

To replace feed motor brushes, do these steps:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!
2. Unscrew the both motor dust cover retaining screws and remove the dust cover **Figure 52**.
3. Unscrew the brush covers from both sides of the motor, and remove the brushes, shown in **Figure 53**.
4. Vacuum out carbon dust from the motor and both brush bores. DO NOT blow dust out with compressed air!
5. Insert new brushes into the slots in the motor housing, ensuring that the brush caps are threaded in completely until they stop.
6. Screw the brush caps in place.
7. Reinstall the motor dust cover.
8. Test run the feed motor.

Figure 52. Feed motor end view.

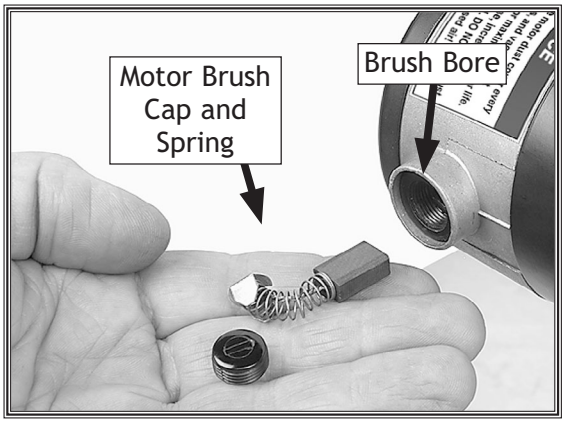


Figure 53. One of two feed motor brushes.

Feed Roller-to-Table Alignment

The feed rollers must be aligned correctly with the table to maintain a smooth and straight feed.

To check the feed roller-to-table alignment, do these steps:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!

2. Remove the chip deflector lock pin, and set the chip deflector aside.

3. Refer to **Figure 54**, and make a wooden gauge block as outlined.

4. Place the finished block on the table, directly under one end of the infeed roller (**Figure 55**).

5. Lower the cutterhead housing so the infeed roller barely touches the gauge block on the lowest end of the roller (**Figure 55**).

6. Slide the block over to the other end of the roller.

7. Using a set of feeler gauges, measure the gap between the roller and the block.

   —If the gap is more than 0.005", then proceed to **Step 8** and adjust the swing arm lower so the gap is less than 0.005".

8. Loosen the cap screw shown in **Figure 56**, then rotate the cam nut until the swing arm lowers and the roller just touches the block.

9. Remove the gauge block and retighten the cap screw.

10. Check and adjust the outfeed roller next.

11. When both rollers are adjusted, check and adjust the feed roller height and spring tension as outlined in the **Feed Roller Height and Spring Tension** section on **Page 21**.

12. When finished, reinstall the chip deflector.

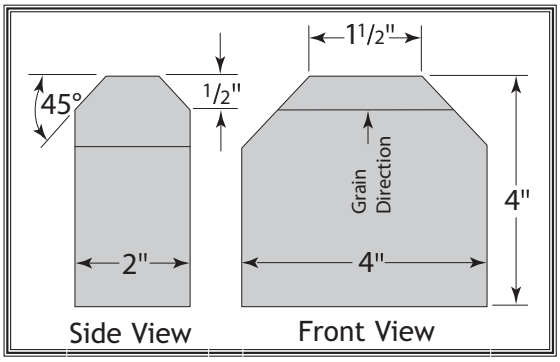


Figure 54. Gauge block plans.

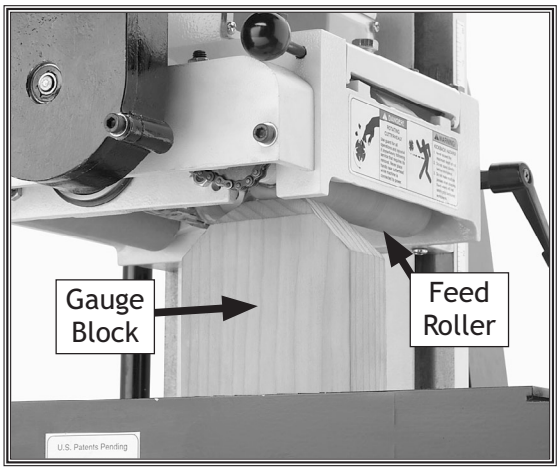


Figure 55. Gauge block.

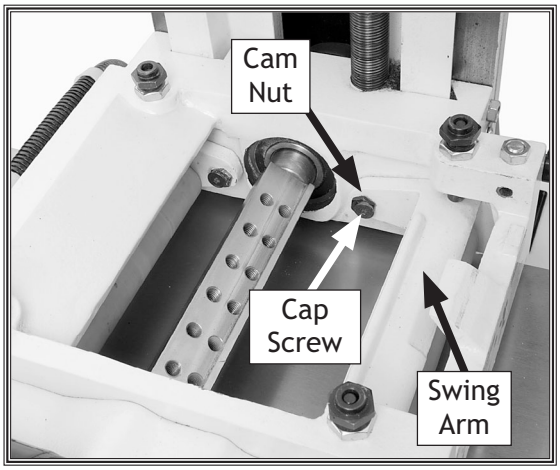


Figure 56. Feed roller adjustment.

SERVICE

Drive Chain Adjustment

If the drive chain tensioner rubber foot (**Figure 57**) wears and the drive chain becomes slack after long-term machine use, the chain will have to be readjusted. The chain should not be tight like a V-belt where there is preload on a pulley and shaft.

The sprocket shafts on this machine must be free floating with no chain tension against them. The chain should have approximately 3-5mm (**Figure 58**) of hanging slack to ensure that the shafts are not always tensioned. However, the chain must still be tight enough so it does not skip sprocket teeth.

To adjust the drive chain slack, do these steps:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!
2. Raise the headstock until you have easy access to the chain area.
3. Loosen the tension adjuster jam nut (**Figure 59**).
4. Use a 4mm hex wrench to adjust the tensioner until there is 3-5mm of hanging slack (**Figure 58**).
5. Tighten the jam nut, and test the operation.

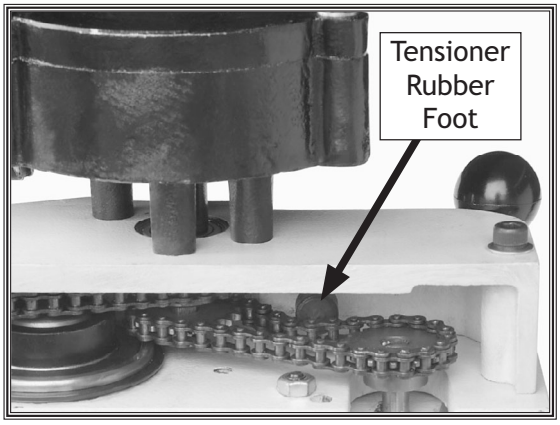


Figure 57. Drive chain assembly.

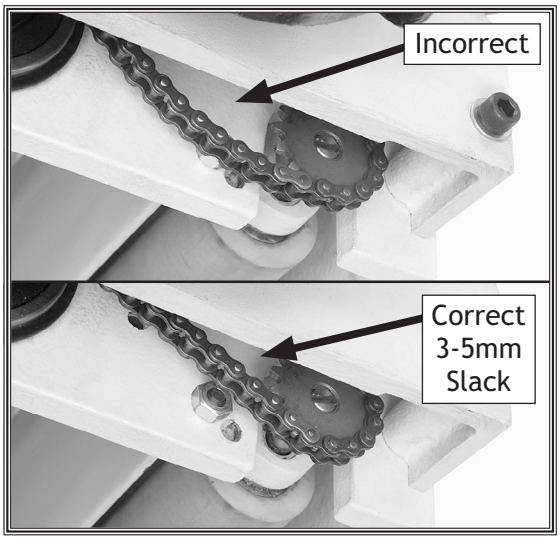


Figure 58. Chain adjustment.

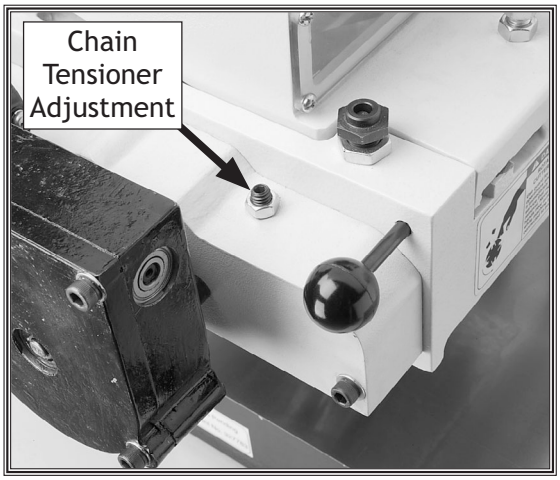


Figure 59. Chain tensioner.

SERVICE

Gib Adjustment

Due to normal wear and break in, the column ways and the headstock gib will eventually have to be readjusted.

To adjust the headstock gib, do these steps:

1. DISCONNECT THE PLANER/MOULDER FROM POWER!
2. Clean and lubricate the column leadscrew, gib, and ways.
3. Loosen the gib jam nuts shown in **Figure 60**.
4. Using a 4mm hex wrench, adjust the upper and lower gib screws in an alternating fashion until a slight drag is detected in the headstock slide when the handwheel is cranked.
5. Tighten the lock nuts.

NOTICE

When adjusting gibs, the goal is to remove unnecessary sloppiness or binding from the headstock as it is slid up and down on the column. A loose gib will allow the headstock to vibrate and the knives to chatter. An overly tight gib will prematurely wear the column and leadscrew.

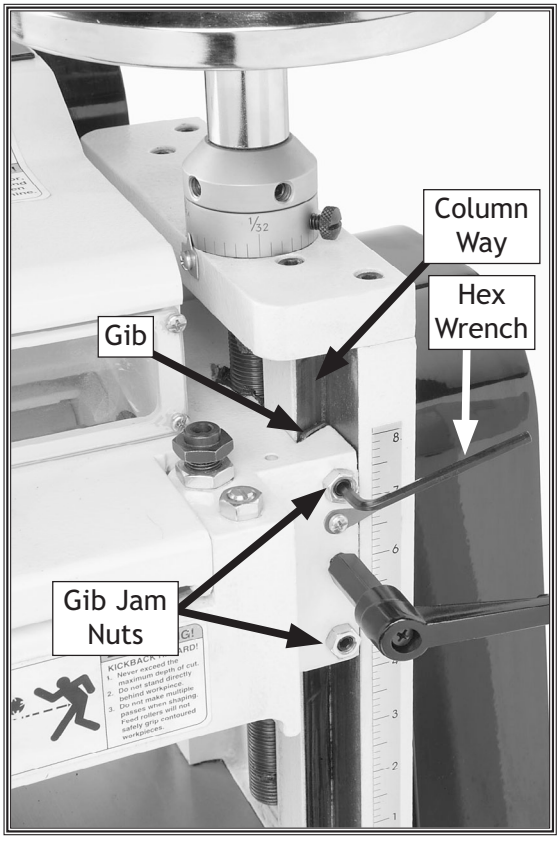


Figure 60. Gib locations.

Electrical Safety Instructions

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this diagram carefully. If you notice differences between your machine and these wiring diagrams, call Woodstock International Technical Support at (360) 734-3482.

⚠WARNING

1. **QUALIFIED ELECTRICIAN.** Due to the inherent hazards of electricity, only a qualified electrician should perform wiring tasks on this machine. If you are not a qualified electrician, get help from one before attempting any kind of wiring job.

2. **WIRE CONNECTIONS.** All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

3. **MODIFICATIONS.** Using aftermarket parts or modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire.

4. **MOTOR WIRING.** The motor wiring shown in these diagrams is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

5. **CAPACITORS.** Some capacitors store an electrical charge for up to five minutes after being disconnected from the power source. To avoid being shocked, wait at least this long before working on capacitors.

6. **CIRCUIT REQUIREMENTS.** You MUST follow the requirements on **Page 12** when connecting your machine to a power source.

7. **WIRE/COMPONENT DAMAGE.** Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components before completing the task.

8. **SHOCK HAZARD.** Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

9. **EXPERIENCING DIFFICULTIES.** If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (360) 734-3482.

NOTICE

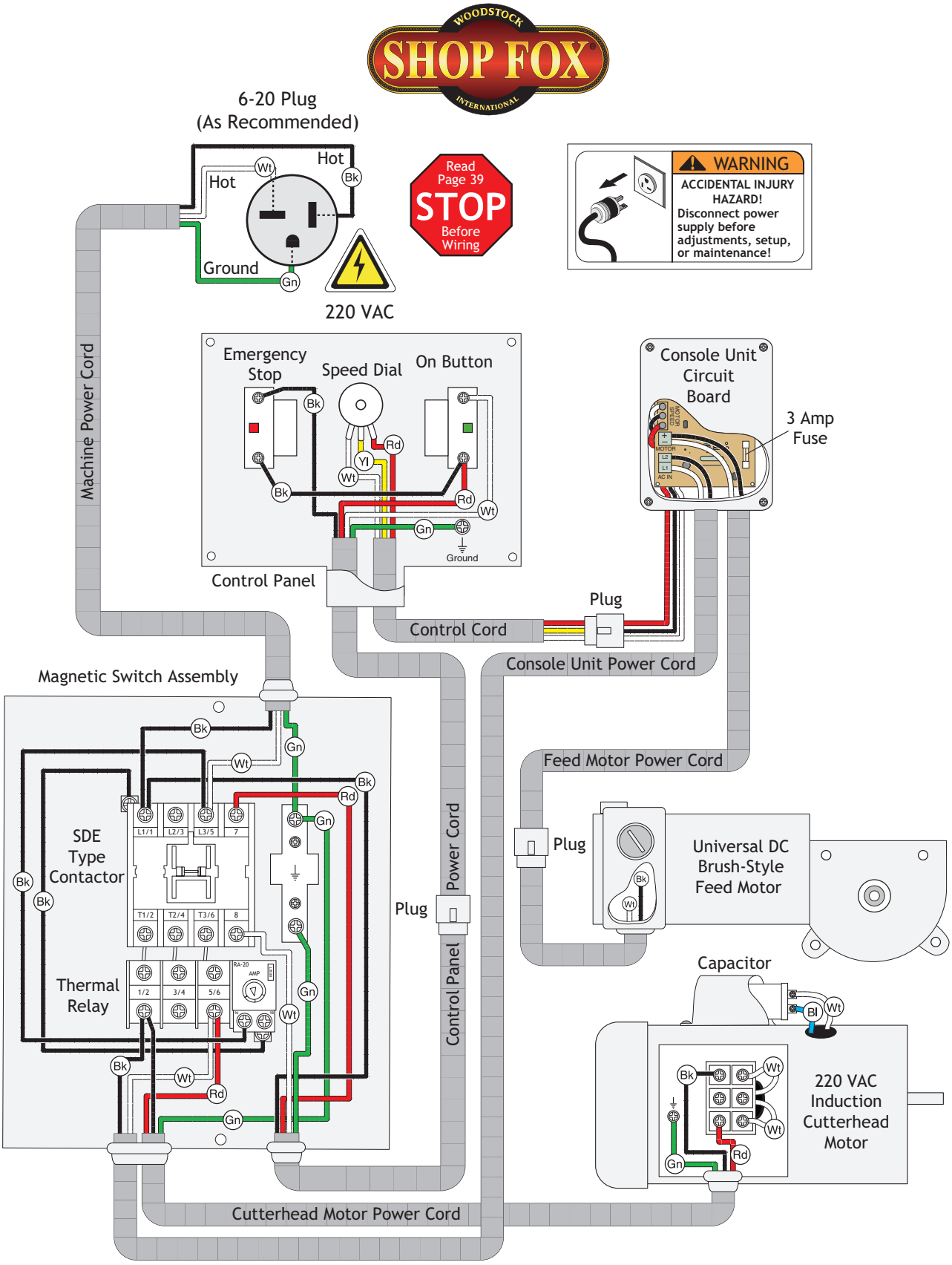
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.shopfox.biz.

WIRING DIAGRAM COLOR KEY

BLACK	Bk	BLUE	Bl	YELLOW	Yl	LIGHT BLUE	Lb
WHITE	Wt	BROWN	Br	YELLOW GREEN	Yg	BLUE WHITE	Bw
GREEN	Gn	GRAY	Gy	PURPLE	Pu	TUR-QUOISE	Tu
RED	Rd	ORANGE	Or	PINK	Pk		

SERVICE

Wiring Diagram



SERVICE

Electrical Component Locations

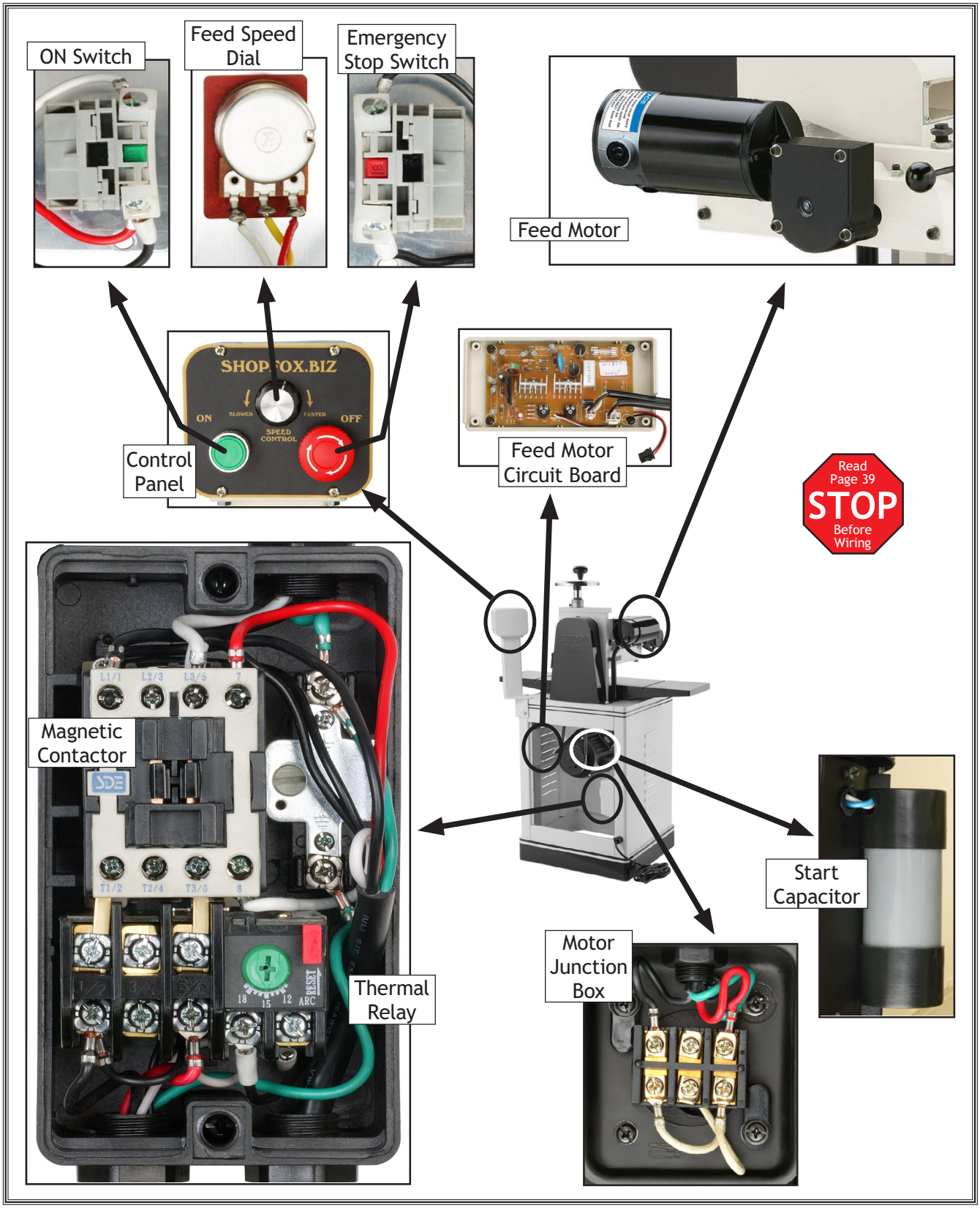


Figure 61. Electrical component locations.

Troubleshooting

This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT make any adjustments until power is disconnected and moving parts have come to a complete stop!**

PROBLEM	POSSIBLE	CORRECTIVE ACTION
Motor will not start.	1. Emergency Stop button is applied or at fault.	1. Rotate button to reset/replace button.
	2. Break or short in wiring; or loose connections.	2. Trace/replace broken or corroded wires; fix loose connections (wiring diagram on **Page 40**).
	3. Power supply switched off/has incorrect voltage.	3. Switch power supply on/verify voltage.
	4. Blown fuse tripped circuit breaker at main panel.	4. Repair for short, then reset/replace fuse or breaker.
	5. Thermal overload relay in mag switch tripped (main motor only).	5. Allow relay/motor to cool. If necessary, press reset button inside switch.
	6. Motor connection wired incorrectly.	6. Wire motor correctly (refer to inside junction box cover or manual wiring diagram on **Page 40**).
	7. Contactor not energized/has poor contacts (main motor only).	7. Test all legs for power, test field coil and replace if at fault (wiring diagram on **Page 40**).
	8. Motor ON switch at fault (main motor only).	8. Replace switch.
	9. Plug or receptacle is corroded or mis-wired.	9. Clean/retighten contacts; correct the wiring (wiring diagram on **Page 40**).
	10. Start capacitor has blown (main motor only).	10. Test/replace if at fault.
	11. Circuit board fuse has blown (feed motor only).	11. Correct overload cause; replace blown fuse on circuit board.
	12. Motor speed rheostat at fault (feed motor only).	12. Test/replace if at fault.
	13. Motor brushes worn/at fault (feed motor only).	13. Replace brush set.
	14. Centrifugal switch at fault (main motor only).	14. Adjust/replace centrifugal switch.
	15. Motor at fault.	15. Test for shorted windings or bad bearings; repair or replace.

SERVICE

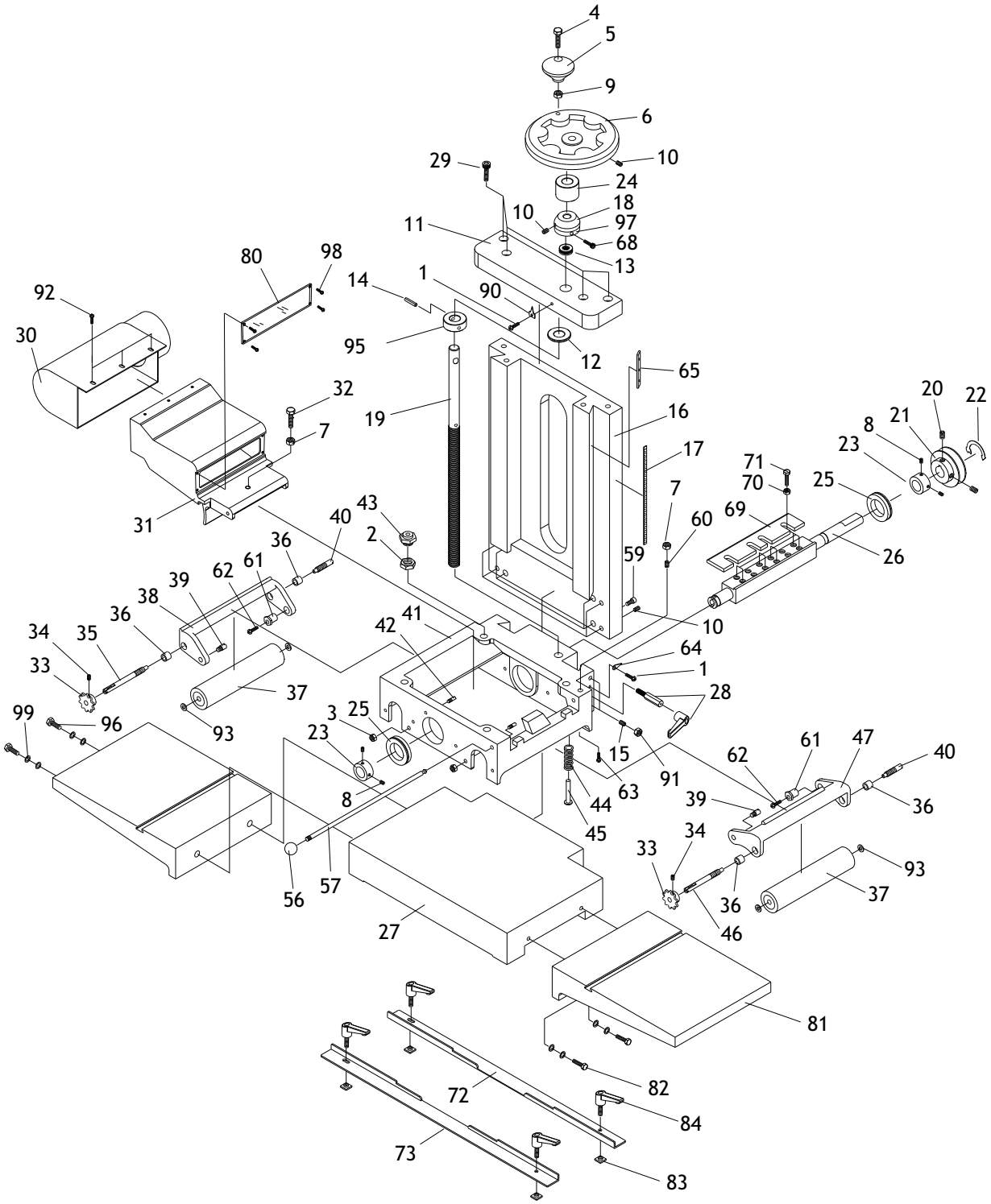
Continued on next page

PROBLEM	POSSIBLE	CORRECTIVE ACTION
Machine has excessive vibration or noise.	1. Motor fan rubbing on fan cover.	1. Fix/replace fan cover; replace loose or damaged fan.
	2. Machine incorrectly mounted on floor or mobile base.	2. Level/shim base; tighten/adjust mounting hardware or feet.
	3. Motor mounting loose.	3. Tighten mounting bolts/nuts; use thread locking fluid.
	4. V-belt at fault.	4. Replace V-belt.
	5. Headstock gib loose.	5. Clean, re-lubricate, and readjust headstock gib (**Page 38**).
	6. Knives are dull.	6. Re-sharpen/replace knives.
	7. Motor brushes worn/at fault (feed motor only).	7. Replace brush set (**Page 35**).
	8. Pulley loose or not in alignment; shaft bent.	8. Replace worn pulley, key, and shaft, and realign.
	9. Gearbox at fault (feed motor only).	9. Rebuild gearbox for bad gear(s)/bearing(s).
	10. Centrifugal switch out of adjustment; at fault (main motor only).	10. Adjust/replace centrifugal switch.
	11. Motor bearings worn or damaged.	11. Replace motor bearings or replace motor.
	12. Cutterhead bearings at fault.	12. Replace bearing(s)/realign cutterhead.
Machine stalls or slows when operating.	1. Too much pressure when feeding workpiece.	1. Reduce pressure when feeding workpiece.
	2. Workpiece is warped.	2. Straighten workpiece or use a different one.
	3. Rails are incorrectly adjusted.	3. Adjust/calibrate rails.
	4. Workpiece material not suitable for machine.	4. Only cut applicable metals with the correct grade and size of blade or bit.
	5. Feed rate or cutting speed too fast.	5. Decrease feed rate or cutting speed.
	6. Belt slipping.	6. Tension/replace belt; ensure pulleys are aligned.
	7. Pulley or sprocket slipping on shaft.	7. Replace pulley and key or set screw. Replace shaft if worn.
	8. Motor connection wired incorrectly.	8. Review wiring diagram under motor junction box cover; correct wire connections.
	9. Motor brushes at fault (feed motor only).	9. Remove/replace brushes.
	10. Circuit board at fault.	10. Inspect circuitry for arcing or burns. Replace if at fault (wiring diagram on **Page 40**).
	11. Motor speed rheostat at fault.	11. Test and replace if at fault.
	12. Contactor has poor contacts.	12. Test all legs for continuity and power, test field coil and replace if at fault.
	13. Centrifugal switch at fault.	13. Adjust/replace centrifugal switch if available.
	14. Motor at fault.	14. Test for shorted windings, bad bearings and repair or replace.
	15. Gears in gearbox broken, slipping, or stuck.	15. Replace for broken or slipping gears.
Handwheel binds or is difficult to move.	1. Lock lever is tightened.	1. Loosen lock lever knob.
	2. Burr, debris, or gunk hindering way and column slide.	2. De-burr, clean and re-lubricate the handwheel leadscrew, ways, and gib.
	3. Bushings worn, dry, or damaged.	3. Clean/lubricate/replace shaft and bushings.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Excessive snipe (there is a dip in the end of the board that is uneven with the rest of the cut).	1. One or both of the feed rollers are set too low. 2. Feed roller springs are applying too much roller pressure. 3. Workpiece is not supported as it leaves the planer/moulder.	1. Adjust the feed rollers to the correct height (**Page 21**). 2. Reduce the feed roller spring tension (**Page 21**). 3. Hold the workpiece up slightly as it leaves the outfeed end of the planer/moulder.
Workpiece stops/slows in the middle of the cut.	1. Taking too heavy of a cut. 2. One or both of the feed rollers are adjusted too high and workpiece slips. 3. Feed roller spring tension is too light. 4. Guide or fence is interfering with the workpiece travel. 5. Pitch and glue build-up on planer components.	1. Raise headstock to take a lighter cut. 2. Lower the feed rollers (**Page 21**) to what is specified in manual. 3. Increase the feed roller spring tension (**Page 21**). 4. Adjust guides or fence for adequate support without workpiece interference. 5. Clean internal cutterhead components with a pitch/resin dissolving solvent.
Chipping (consistent pattern).	1. Knots or conflicting grain direction in wood. 2. Nicked or chipped knife. 3. Feeding workpiece too fast. 4. Taking too deep of a cut.	1. Inspect workpiece for knots and grain direction; only process clean stock (**Page 23**). 2. Replace the affected knife, or have it sharpened. 3. Slow down the feed rate. 4. Take a smaller depth of cut. Always reduce cutting depth when surface planing or working with hard woods (**Page 23**).
Chipping (inconsistent pattern).	1. Chips are not being properly expelled from the cutterhead area.	1. Provide a minimum of 400 CFM at the port, and keep dust collector and ducting free of clogs and restrictions.
Fuzzy grain.	1. Wood may have high moisture content or surface wetness. 2. Dull knives. 3. Chips are not being properly expelled from the cutterhead area.	1. Check moisture content and allow to dry if moisture is too high (**Page 23**). 2. Replace the knives or have them professionally sharpened. 3. Provide a minimum of 400 CFM at the port, and keep dust collector and ducting free of clogs and restrictions.
Long lines or ridges that run the length of the board.	1. Nicked or chipped knife(s).	1. Replace or sharpen the knives.
Uneven knife marks, wavy surface, or chatter marks across the face of the board.	1. Moulding knife is installed at outboard side of cutterhead. 2. Feeding workpiece too fast. 3. Feed roller spring tension is too light. 4. Knives are loose. 5. Headstock is loose. 6. Worn cutterhead bearings.	1. Install moulding knife at the inboard side of cutterhead. 2. Slow down the feed rate. 3. Increase the feed roller spring tension (**Page 21**). 4. Remove the knives, clean knife mounting surfaces, and reinstall knives. 5. Adjust headstock gib (**Page 38**), and be sure to use headstock lock lever. 6. Replace cutterhead bearings.
Glossy surface.	1. Knives are dull. 2. Feed rate too slow. 3. Cutting depth too shallow.	1. Replace or sharpen the knives. 2. Increase the feed rate. 3. Increase the depth of cut.

PARTS

Headstock

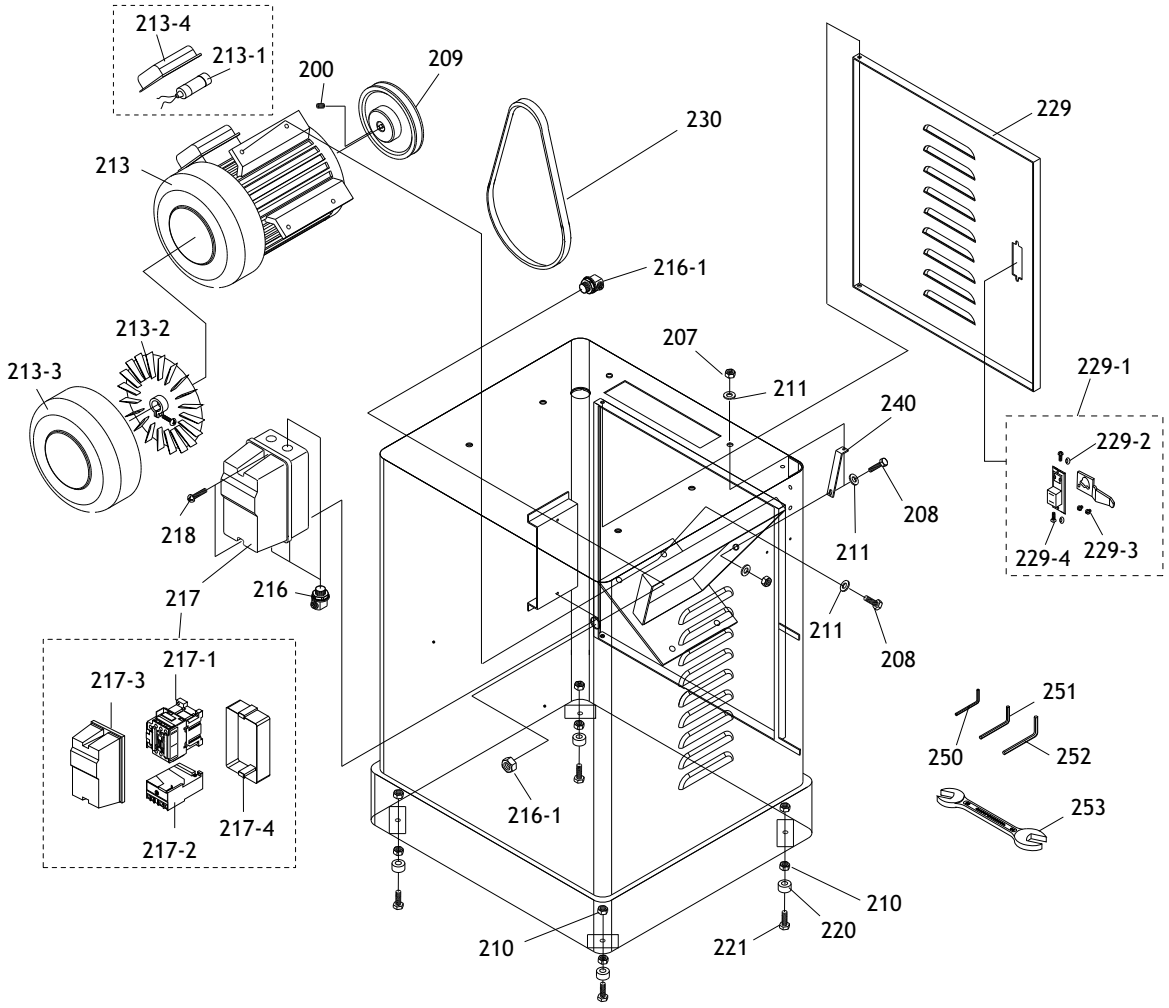


Headstock Parts List

REF	PART #	DESCRIPTION
1	XPS07M	PHLP HD SCR M4-.7 X 8
2	XPN06	HEX NUT 1/2-12
3	XPN05	HEX NUT 1/4-20
4	XPB25	HEX BOLT 3/8-16 X 1-3/4
5	X1812005	KNOB
6	X1812006	HANDWHEEL
7	XPN08	HEX NUT 3/8-16
8	XPSS11	SET SCREW 1/4-20 X 1/4
9	XPN08	HEX NUT 3/8-16
10	XPSS08	SET SCREW 5/16-18 X 1/2
11	X1812011	TOP BRACE
12	XPW14	FLAT WASHER 5/8
13	XP51104	THRUST BEARING 51104
14	XPRP73M	ROLL PIN 4 X 30
15	XPSS01	SET SCREW 5/16-18 X 1
16	X1812016	DOVETAILED COLUMN
17	X1812017	SCALE
18	X1812018	SCALE COLLAR
19	X1812019	ELEVATING SCREW
20	XPSS02	SET SCREW 5/16-18 X 3/8
21	X1812021	CUTTERHEAD PULLEY
22	X1812022	ROTATION LABEL
23	X1812023	COLLAR
24	X1812024	SPACER
25	X1812025	BALL BEARING 6206 2RS+NR
26	X1812026	CUTTERHEAD
27	X1812027	TABLE
28	X1812028	LOCK LEVER ASSEMBLY
29	XPCAP06	CAP SCREW 1/4-20 X 1
30	X1812030	DUST COVER
31	X1812031	CHIP DEFLECTOR
32	XPB18	HEX BOLT 3/8-16 X 1
33	X1812033	FEED ROLL SPROCKET
34	XPSS29	SET SCREW 10-24 X 1/4
35	X1812035	OUTFEED DRIVE AXLE
36	X1812036	NEEDLE BEARING
37	X1812037	RUBBER FEED ROLLER
38	X1812038	OUTFEED SWING ARM

REF	PART #	DESCRIPTION
39	X1812039	SWING ARM AXIS SCREW
40	X1812040	DRIVEN AXLE
41	X1812041	HEAD CASTING
42	X1812042	SWING ARM STOP PIN
43	X1812043	ROLLER PRESSURE SCREW
44	X1812044	COMPRESSION SPRING
45	X1812045	ROLLER PRESSURE PIN
46	X1812046	INFEED DRIVE AXLE
47	X1812047	INFEED SWING ARM
56	X1812056	KNOB 1/4-20
57	X1812057	CHIP DEFLECTOR AXIS PIN
59	XPCAP03	CAP SCREW 5/16-18 X 1
60	X1812060	BALL PLUNGER 3/8-16 X 3/4
61	X1812061	ECCENTRIC BUSHING
62	XPFH12	FLAT HD SCR 1/4-20 X 1
63	XPS07	PHLP HD SCR 1/4-20 X 3/8
64	X1812064	POINTER
65	X1812065	GIB
68	X1812068	SCALE ROLLER SCREW
69	X1812069	PLANER KNIFE SET
70	XPW02	FLAT WASHER 3/8
71	XPB18	HEX BOLT 3/8-16 X 1
72	X1812072	INNER RAIL
73	X1812073	OUTER RAIL
80	X1812080	WINDOW
81	X1812081	EXTENSION WING
82	XPB24	HEX BOLT 3/8-16 X 1-1/4
83	X1812083	T-NUT M6-1
84	X1812084	LEVER ASSEMBLY M6-1
90	X1812090	POINTER
91	XPN02	HEX NUT 5/16-18
92	XPFB05	FLANGE BOLT 10-24 X 1/2
93	XPW07	FLAT WASHER 5/16
95	X1812095	COLLAR
96	XPFB17	FLANGE BOLT 10-24 X 3/8
97	X1812097	SCALE HUB
98	XPS06	PHLP HD SCR 10-24 X 3/8
99	XPLW04	LOCK WASHER 3/8

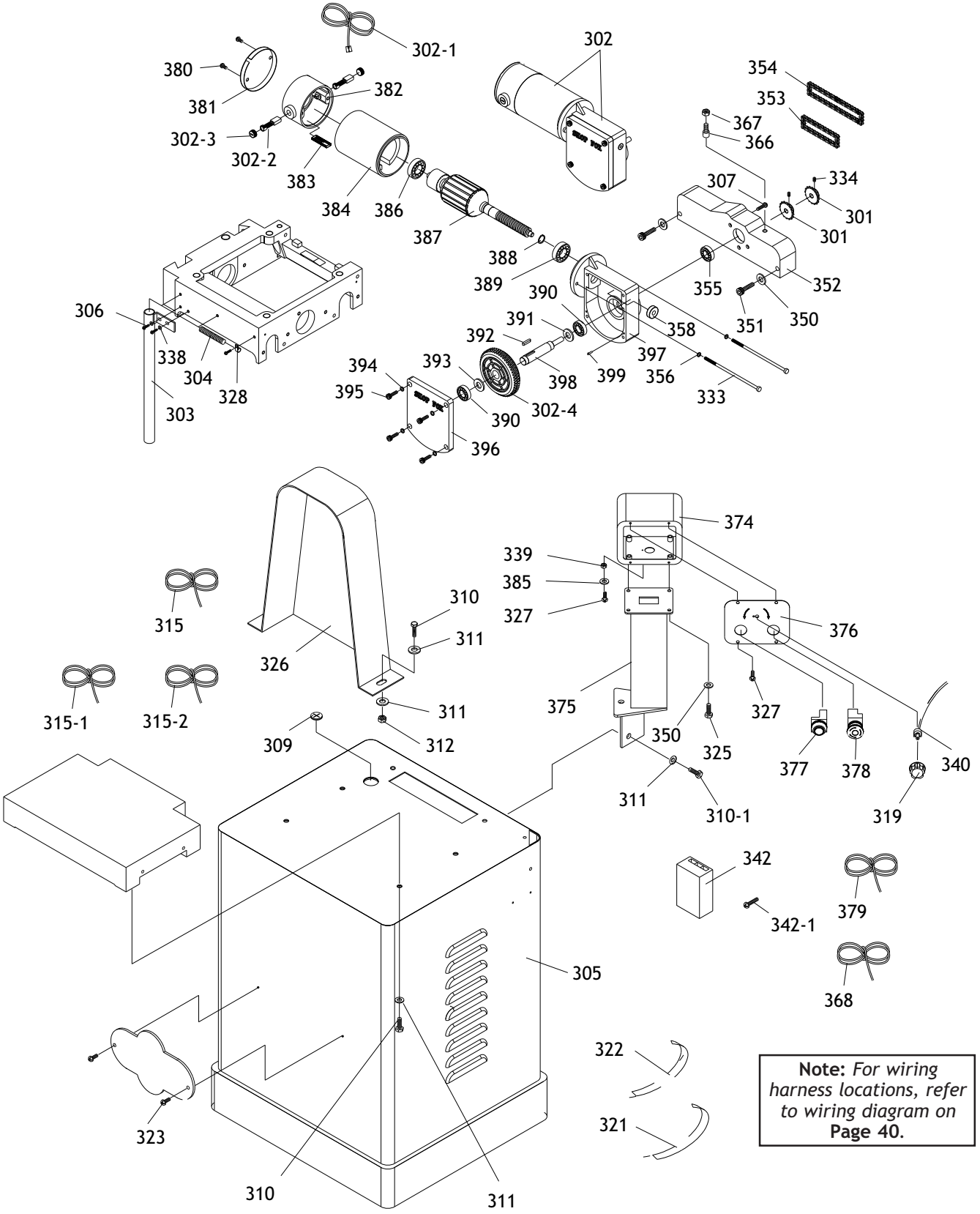
Main Motor and Cabinet



REF	PART #	DESCRIPTION
200	XPSS02	SET SCREW 5/16-18 X 3/8
207	XPN02	HEX NUT 5/16-18
208	XPB07	HEX BOLT 5/16-18 X 3/4
209	X1812209	MOTOR PULLEY
210	XPN08	HEX NUT 3/8-16
211	XPW07	FLAT WASHER 5/16
213	X1812213	MOTOR 2HP 220V
213-1	XPC400C	S CAPACITOR 400M 250V 1-3/4 X 3-3/4
213-2	X1812213-2	FAN
213-3	X1812213-3	FAN COVER
213-4	X1812213-4	CAPACITOR COVER
216	X1812216	STRAIN RELIEF
216-1	X1812216-1	STRAIN RELIEF
217	X1812217	MAGNETIC SWITCH ASSEMBLY MPZ-09
217-1	X1812217-1	CONTACTOR SDE MA15 220V
217-2	X1812217-2	OL RELAY SDE RA-20 12-18A

REF	PART #	DESCRIPTION
217-3	X1812217-3	COVER
217-4	X1812217-4	MAIN HOUSING
218	XPS22	PHLP HD SCR 10-24 x 5/8
220	X1812220	RUBBER FOOT
221	XPB24	HEX BOLT 3/8-16 X 1-1/4
229	X1812229	VENTED REAR PANEL
229-1	X1812229-1	LATCH ASSEMBLY
229-2	X1812229-2	SPACER
229-3	XPFS19M	FLANGE SCREW M4-.7 X 4
229-4	XPS17M	PHLP HD SCR M4-.7 x 6
230	X1812230	LINK BELT 1/2 X 45"
240	X1812240	BRACKET
250	XPAW0332M	HEX WRENCH 3/32
251	XPAW04M	HEX WRENCH 4MM
252	XPAW05M	HEX WRENCH 5MM
253	XPWR1214	COMBO WRENCH 12/14MM

Feed Motor and Controls



Note: *For wiring harness locations, refer to wiring diagram on* **Page 40.**

PARTS

Feed Motor and Controls Parts List

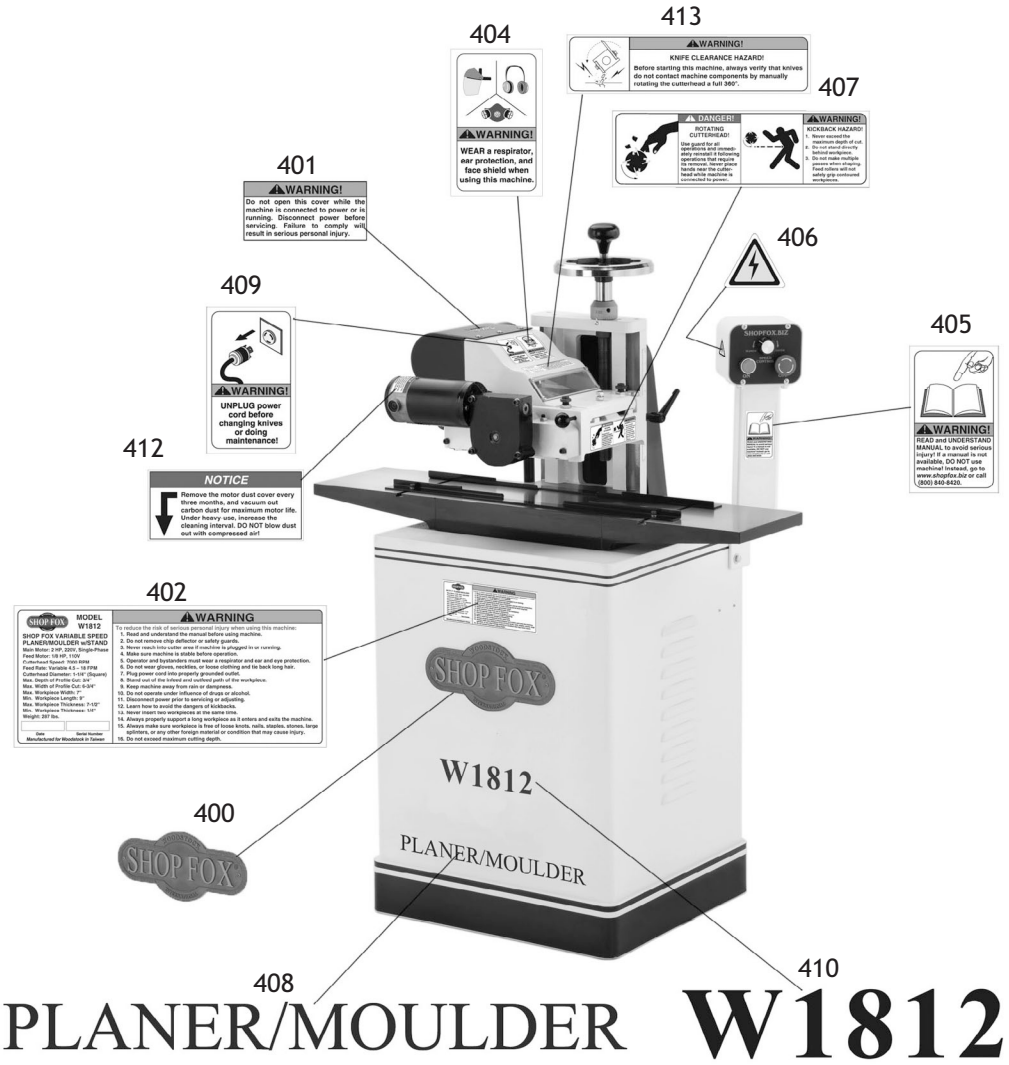
REF	PART #	DESCRIPTION
301	X1812301	FEED ROLL SPROCKET
302	X1812302	FEED MOTOR 1/4 HP 220V
302-1	X1812302-1	FEED MOTOR POWER CORD
302-2	X1812302-2	FEED MOTOR BRUSH SET
302-3	X1812302-3	PLASTIC LOCK SCREW
302-4	X1812302-4	DRIVE GEAR
303	X1812303	STEEL CONDUIT
304	X1812304	PLASTIC CONDUIT
305	X1812305	STAND
306	XPS06	PHLP HD SCR 10-24 X 3/8
307	XPFH05	FLAT HD SCR 1/4-20 X 3/4
309	X1812309	GROMMET 30MM
310	XPB07	HEX BOLT 5/16-18 X 3/4
310-1	XPB03	HEX BOLT 5/16-18 X 1
311	XPW07	FLAT WASHER 5/16
312	XPN02	HEX NUT 5/16-18
315	X1812315	MACHINE POWER CORD 220V
315-1	X1812315-1	CUTTERHEAD MOTOR POWER CORD
315-2	X1812315-2	CONTROL PANEL POWER CORD
319	X1812319	VARIABLE SPEED CONTROL KNOB
321	X1812321	BOTTOM COLOR STRIPE
322	X1812322	UPPER COLOR STRIPE
323	XPHTEK36	TAP SCREW #6 X 3/8
325	XPB19	HEX BOLT 1/4-20 X 1/2
326	X1812326	PULLEY COVER
327	XPS06	PHLP HD SCR 10-24 X 3/8
328	X1812328	CABLE CLAMPS
333	X1812333	MOTOR CASE SCREW M5-.8 X 133
334	XPSS29	SET SCREW 10-24 X 1/4
338	XPW04M	FLAT WASHER 10MM
339	XPN07	HEX NUT 10-24
340	X1812340	SPEED CONTROL SWITCH
342	X1812342	CONSOLE UNIT
342-1	XPHTEK28M	TAP SCREW M4 X 25
350	XPW06	FLAT WASHER 1/4
351	XPSB159M	CAP SCREW 1/4-20 X 2

REF	PART #	DESCRIPTION
352	X1812352	CHAIN COVER
353	X1812353	INFEED ROLLER DRIVE CHAIN
354	X1812354	OUTFEED ROLLER DRIVE CHAIN
355	XP6902-2RS	BALL BEARING 6902-2RS
356	XPLW01M	LOCK WASHER 5MM
358	XP608-2RS	BALL BEARING 608-2RS
366	X1812366	CHAIN TENSIONER FOOT
367	XPN02	HEX NUT 5/16-18
368	X1812368	CONSOLE UNIT POWER CORD
374	X1812374	CONTROL BOX
375	X1812375	CONTROL BOX BRACKET
376	X1812376	CONTROL PLATE
377	X1812377	ON SWITCH
378	X1812378	OFF SWITCH
379	X1812379	CONTROL CORD
380	XPS19M	PHLP HD SCR M5-.8 X 6
381	X1812381	END CAP
382	X1812382	BRUSH HOUSING
383	X1812383	THERMOCOUPLE
384	X1812384	STATOR HOUSING
385	XPTLW08M	EXT TOOTH WASHER 10MM
386	XP6200-2RS	BALL BEARING 6200-2RS
387	X1812387	ARMATURE
388	XPR06M	EXT RETAINING RING 16MM
389	XP6203-2RS	BALL BEARING 6203-2RS
390	XP6202-2RS	BALL BEARING 6202-2RS
391	X1812391	SHIM
392	XPK34M	KEY 5 X 5 X 20
393	X1812393	SPACER
394	XPLW01M	LOCK WASHER 5MM
395	XPS20M	PHLP HD SCR M5-.8 X 15
396	X1812396	COVER
397	X1812397	CASE
398	X1812398	GEAR SHAFT
399	XPRP44M	ROLL PIN 3 X 10

Label Placement

⚠WARNING

Safety labels warn about machine hazards and how to prevent machine damage or injury. The owner of this machine MUST maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, REPLACE that label before allowing the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or www.shopfoxtools.com to order new labels.



PLANER/MOULDER **W1812**

REF	PART #	DESCRIPTION
400	D3377	LOGO SHOP FOX
401	X1812401	COVER WARNING LABEL
402	X1812402	ID LABEL
404	X1812404	COVER WARNING LABEL
405	XLABEL-12	READ MANUAL LABEL
406	XLABEL-04	ELECTRICITY LABEL

REF	PART #	DESCRIPTION
407	X1812407	CUTTERHEAD WARNING LABEL
408	X1812408	MACHINE NAME LABEL
409	PLABEL-63	DISCONNECT 220V LABEL
410	X1812410	MODEL NUMBER LABEL
412	X1812412	MOTOR DUST LABEL
413	X1812413	KNIFE CLEARANCE LABEL

Warranty Registration

Name_____

Street _____

City _____ State_____ Zip_____

Phone #_____ Email_____ Invoice #_____

Model #_____ Serial #_____ Dealer Name_____ Purchase Date_____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential****.*

1. How did you learn about us?

_____ Advertisement _____ Friend ____ Local Store
_____ Mail Order Catalog _____ Website ____ Other:

2. How long have you been a woodworker/metalworker?

_____ 0-2 Years _____ 2-8 Years ____ 8-20 Years _____ 20+ Years

3. How many of your machines or tools are Shop Fox?

_____ 0-2 _____ 3-5 ____ 6-9 _____ 10+

4. Do you think your machine represents a good value? _____ Yes ____ No

5. Would you recommend Shop Fox products to a friend? _____ Yes ____ No

6. What is your age group?

_____ 20-29 _____ 30-39 ____ 40-49
_____ 50-59 _____ 60-69 ____ 70+

7. What is your annual household income?

_____ $20,000-$29,000 _____ $30,000-$39,000 ____ $40,000-$49,000
_____ $50,000-$59,000 _____ $60,000-$69,000 ____ $70,000+

8. Which of the following magazines do you subscribe to?

____ Cabinet Maker
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Modeltec
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Practical Homeowner
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

9. Comments:_____

_____

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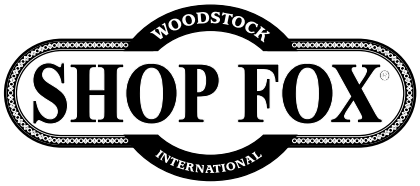
CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here



WOODSTOCK INTERNATIONAL INC.
P.O. BOX 2309
BELLINGHAM, WA 98227-2309

FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY

Woodstock International, Inc. warrants all Shop Fox machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the Shop Fox machine or machine part, which in normal use has proven to be defective, provided that the original owner returns the product prepaid to a Shop Fox factory service center with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.’s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that Shop Fox machinery complies with the provisions of any law, acts or electrical codes. We do not reimburse for third party repairs. In no event shall Woodstock International, Inc.’s liability under this limited warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all Shop Fox machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.